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ABSTRACT

Educational consultants, town residents, Navajo tribal chapters and councils, the Bureau of Indian Affairs, the Navajo Division of Education, and local public school districts in Navajo, New Mexico, worked together to design an effective vocational program for an unskilled labor force sparsely settled within a large geographic area. The concept of building a program around "vocational modules" that would provide training for skills common to a variety of occupations became the central focus of the study and formed the basis for the research design. Feasibility conditions included: a small student population; a wide range of occupations for placement; a need for both youth and adult enrollment; preparation for jobs in the community and on and off the Reservation; community support; and the labor requirements of employers. Four major sources provided information: relevant research and studies; a community education survey of job openings and employee skill requirements and existing successful programs for Indians. Data analyzed in the context of the feasibility conditions formed the basis for conclusions and recommendations. The approaches used throughout the study and the copies of the survey instruments included in the appendices should serve as a model to assist others attempting to build vocational programs for small communities. (NEC)

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A Study Of The Feasibility Of Vocational Modules

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Navajo Division
Of Education
Window Rock, Arizona
And
American Institutes
For Research
Palo Alto, California

RC 011484

A STUDY OF THE FEASIBILITY OF VOCATIONAL MODULES

This final project report is one of three publications completed by the Navajo Division of Education, with subcontract assistance from the American Institutes for Research (AIR), under provisions of Federal Grant No. G007603818 from the United States Office of Education, Department of Health, Education and Welfare, under Part C of the Vocational Education Act of 1963.

- A Study of the Feasibility of Vocational Modules
- A Feasibility Study Planning Manual
- Catalog of Vocational Education and Related Programs Designed for Instruction of American Indians

June, 1978

The Navajo Division of Education of the Navajo Nation and the Youth Development Research Group of AIR were responsible for the research and writing of this project report. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

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PREFACE

One of the requirements of this research project was the use of an advisory committee. Residents of the Navajo Community served as members, with representation from the local Tribal Chapters of Crystal, Red Lake, and Sawmill, the Town of Navajo, business and industry, parents and students. A very special note of thanks and appreciation is given to the committee members for their diligence and expert advice on how to work effectively with the Navajo people and their culture, as well as for their review, discussion, comments, recommendations, and approval of the many activities, questionnaires, and conclusions of the study.

Important to the project were the assessment of the vocational/educational needs of the residents of the Navajo Community and the survey of area employers to determine job tasks and skills most necessary to the employee and the employer. Strong commendation and thanks are given to the fluently bilingual Navajos who did the interviewing for the community and employer surveys. Without their effective performance of a difficult task, this research could not have been accomplished. The members of the advisory committee and names of the interviewers are listed on the next page.

Many other persons from the various groups that contributed to the study deserve recognition and we want each of them to know of our sincere appreciation for their cooperation and help. Very special thanks go to all of the families and employers who answered the survey questionnaires.

Much of the credit for the direction and implementation of the research goes to Dillon Platero, former Director of Navajo Division of Education, and Joseph C. Bellenger who served as the Research Coordinator. Susan McBain and Dr. Brian Jones of the American Institutes for Research also receive our recognition for their work and contributions.

It is our belief that the results of this study will assist us in our new impetus and direction for vocational education within the Navajo Reservation.

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Director
Navajo Division of Education

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Red Lake Chapter Representative

Mr. Donald A. McCabe
President
Navajo Community College

Mr. Dave Petersen
Sports and Entertainment Promoter

The following persons served as interviewers for the Navajo Community Vocational/Educational Needs Assessment.

Margaret Ashley
Miriam Begay
Linda Betone
La Vale Footracer
Loretta Jumbo
Christine Tsosie
Susie Yazzie

The Employer Survey interviews were done by Ralph Bennett and Mary Wilson.

CHAPTER I

THE VOCATIONAL EDUCATION NEED OF THE NAVAJO NATION

The Vocational Education Act (VEA), Research (Part C) application which was approved to fund this study was developed from a concrete and pressing problem for the Navajo Nation: How to provide effective vocational education for an unskilled labor force sparsely settled within a large geographic area? With the impact of the Indian Self Determination and Education Assistance Act (PL 93-638) there was increasing awareness and concern by the Navajo Division of Education (NDOE) and community groups within the Reservation for the low educational achievement level of the Navajo people.

One of the principal needs that was recognized and emphasized was the necessity for vocational education and manpower training. Economic Development Aid funds and Comprehensive Employment Training Act (CETA) programs provided some specific training for adults, but little was available to high school and out-of-school youth as well as to a majority of adults unable to qualify for or enroll in the manpower training programs.

The economic development of the Navajo Nation, by and for the Navajos, requires skill training for the large majority who are unskilled or semi-skilled. They must be prepared to provide a majority of the labor force needed to keep pace with the economic development of the Tribe's natural resources of coal, uranium, gas, agricultural and forest products. Otherwise, outside labor sources will still leave the Navajo people in relative poverty.

An opportunity to attack directly the question of "What kind of vocational education?" came from the efforts of the Town of Navajo to develop and build a vocationally based high school. The Management Board of the Navajo Forest Products Industries (NFPI), a Tribal Enterprise, took the initiative to provide the high school for the Navajo Community, which is the home of NFPI. The town is 20 years old, growing, and has a K-9 school operated by the Gallup-McKinley County School District of New Mexico.

As an educational consultant and Town of Navajo residents developed plans for the vocational school, support was gained from the local Navajo Chapters, the Tribal Council, the Bureau of Indian Affairs (BIA), the NDOE, and the local public school districts. It was important to all of them to improve the vocational education system.

Few studies had been made of vocational education on the Navajo Reservation. Little was known about the desires of the people. More information was needed about the employers' labor requirements. As a result of these conditions an intensive study of the Navajo Community area was projected to answer questions basic to planning effective vocational education programs.

It was obvious that the limited number of students available would not permit separate vocational training programs in all the various job categories. Nor would the limited number of jobs in some areas support the flow of graduates from a single-occupation program.

The notion of vocational skills common to a variety of jobs seemed comparable to the well-established idea of the 3 Rs as basic to academic education -- and vocational education. Is there a body of knowledge and skills that can be considered as "the basic vocational skills" in the same manner that the 3 Rs are basic academic skills?

Relating this question to the problem of designing an effective vocational program for a small school led to the concept of "vocational modules" that would provide the training for skills common to a variety of occupations. From this developed the central question for this research project: "Are vocational modules feasible?"

The conditions of feasibility were as follows:

1. a small student (youth and adult) population;
2. a fairly wide range of occupations available for placement;
3. the need for both youth and adults to enroll in vocational classes;
4. preparation for jobs in the community, on the Reservation at large, and off the Reservation;
5. community support for vocational education; and
6. the labor requirements of employers.

The research design was based on the central feasibility question and the accompanying conditions. Information was sought from four major sources:

1. relevant research and studies;
2. a community educational needs assessment with emphasis on vocational education;
3. an employer survey of job openings and employee skill requirements; and
4. existing successful vocational programs for Indians.

Regarding the first source, among the studies and research reports that were reviewed, 17 were sufficiently relevant to be summarized in Chapter II for this project. Each study reviewed is followed by a statement, labelled "Feasibility Connection" summarizing its relationship to the feasibility study. The procedures used in, and findings produced by, the other three information sources, are reported in Chapters III - V.

The term "Feasibility Connection" is used here to identify the major points that were supported by findings from each of the four information sources. These provide the basic points for the final conclusions of this research project, as presented in Chapter VI. For each of the next four chapters, a summary of the feasibility connections is derived. This summary information is labelled "Feasibility Statement."

The community vocational/educational needs assessment is reported in Chapter III. The questionnaire developed and administered in that phase of the project is described there. The data collected by this instrument are summarized and displayed and are followed by a set of conclusions and recommendations. The feasibility connection and statement as described above conclude the chapter.

The critical incident procedure was also used in the community needs assessment to help identify both vocational needs and educational methods. This technique encouraged interviewees to provide open ended responses that paralleled some of the answers from the objective questions. The four major themes that emerged from the critical incidents provided support for the feasibility statement of Chapter III.

The employer survey of job openings and job skill requirements is reported in Chapter IV. The data required a straightforward tabulation process for a portion of the questionnaire answers and an interpretative categorization of the open ended job skill responses. A full description of the procedures is given. Once again these data are used to formulate the chapter's feasibility connection and statement. These, in turn, contribute significantly to the determination of the feasibility of vocational modules.

A nationwide search was made for vocational programs that were successful with Indian students. Fewer programs were identified than had been anticipated. However, significant information was gained from the 34 responses that were chosen for publication. Information concerning the program search and a summary of each program are included in a companion publication entitled Catalog of Vocational and

Related Programs Designed for Instruction of American Indians. Chapter V is an analysis of the contributions that these programs make to the final feasibility conclusions of this study.

Chapter VI integrates the feasibility statements of the project's four data sources. The conclusions and recommendations are analyzed in the context of the feasibility conditions. From this analysis, a logical sequence of ideas is deduced that leads to final statements of the feasibility of using vocational modules as an essential part of the proposed vocational program which this project addressed.

Also included in that chapter is a flowchart which summarizes the relationship of all components needed to develop an array of vocational modules, and a time/task/responsibility chart for implementing that developmental process. The final section of this report is a set of appendices, which includes copies of the survey instruments used.

Another product this project was committed to develop was a Planning Manual for a Feasibility Study that could assist other persons interested in conducting research activities similar to those used in this study. While not directly related to the feasibility outcomes of this research project, the development of the manual proved to be a challenging and stimulating task. The manual is published as a separate document.

CHAPTER II

RELATED RESEARCH

At the start of this project only one study of vocational education, conducted by the RJ Associates of Washington, D.C., had been authorized by the Navajo Division of Education. A second study, carried out by the Native American Research Associates of Lawrence, Kansas, was completed in May 1977.

A third study that included information pertinent to vocational education is entitled Navajo Nation Educational Hearings and was completed in 1977. These bi-lingual hearings on the educational needs of the Navajo People were held in Chapter Houses across the Nation in 1975. This final report provides direction for "a truly Navajo education which will provide wise, just, and learned Navajo leaders."[1]

Other studies, especially those done by the Navajo Tribal Office of Program Development, were also reviewed because they were regarded as having the potential of contributing to the project's final feasibility conclusions. In all, 17 research studies and surveys conducted between 1969 and 1977 were found to have direct significance for vocational education on the Navajo Indian Reservation.

A brief summary of each reference document is presented here. The way in which each reference relates to this feasibility study on vocational modules is summarized under the heading, "Feasibility Connection." The final section of this chapter, a summary of the 17 "Feasibility Connections," derives a feasibility statement that contributes to the conclusions presented in Chapter VI.

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1. Tribal Chairman Peter MacDonald in his cover letter for the project.

Vocational Education Needs and Opportunities for Indians

Sterling Institute, Washington D. C.

1969

A brief review of the Navajo vocational education needs and lack of opportunities with an emphasis on the need for vocational training by a local community. Questions of what kind of vocational education, and when, and how it can be provided are raised in relation to specific growth predictions for Four Corners.

Feasibility Connection

An early expression of need for vocational education and a search for how.

Navajo Employer Demand Survey

Arizona State Employment Service, Phoenix, Arizona

1969

This survey of Navajo labor demand followed a 1967 study of the labor supply. Most of the report is a reproduction in tabular form of the results obtained. The survey revealed 381 current job openings with another 446 openings anticipated within the next 12 months. The largest number of job openings (45%) were in professional, technical, and managerial categories.

A final section of the report analyzed the need for vocational training and stated that the relatively few job opportunities on the Reservation for semi-skilled and skilled occupations did not justify extensive manpower training programs.

Feasibility Connection

The results of the survey support the desirability of preparing Navajos for jobs, but clearly indicate that training for specific jobs should be limited in view of the small number of openings in each job area. This is a strong implication that vocational education curricula must deal with common basics and prepare Navajos to compete for jobs within a variety of occupational categories.

Early Job Development in the Four Corners Region
Thiokal Chemical Corporation, Economic Development Operations
Ogden, Utah
1970

This study concerns the social, economic, and educational conditions that relate to jobs and job development for the Navajos. The principal purpose was to establish a data base and operational plan to support job development proposals. Seventeen of the 18 sub-regions comprising the Navajo Nation needed vocational training programs to prepare Navajos to perform the jobs required for economic growth.

Feasibility Connection

The relationship of vocational education to economic development presents a unique problem within a cultural structure that differs in many ways from today's American way of life. The development of vocational education for the Navajo--and other Indian tribes--requires creative attention to the curriculum and the teaching-learning methodology.

Strengthening Navajo Education, Division of Education
The Navajo Tribe, Window Rock, Arizona
1973

This booklet provides a brief historical review of formal education provided to the Navajos since 1882, and an analysis of the status and problems of Navajo education then and now. In general, the conclusion is that the educational system has been a failure. The Navajos have the lowest educational attainment of any American group of people.

> In summary, the relevancy of education in meeting the linguistic, social, cultural, and economic needs of the Navajo people is a critical issue and a matter of paramount concern. If all men are guaranteed the right to an equal education opportunity, does this not also include the Navajo people? Does the Navajo have any less right to direct his future than any other citizen? (Page 25)

The monograph states that there is need to establish a Tribal Education Agency to coordinate and direct the diverse educational alternatives now provided,

and concludes by asserting "that the focus of Navajo education should be on the growth and development of Navajo children and the advancement of Navajo communities." (Page 40)

Feasibility Connection

The Navajo Tribe is requesting educational improvement for Navajos, the establishment of an agency to involve and move people, and the development of local schools.

Eleven Programs for Strengthening Navajo Education
Navajo Division of Education, The Navajo Tribe
Window Rock, Arizona
1973

This booklet is significant as the first major statement by the Navajo Nation on programs required to strengthen Navajo Education and follows within six months the Tribe's analytical statement on "Strengthening Navajo Education" which is described in the preceding summary.

Among the 11 programs, the educational needs assessment contained preliminary findings relevant to this feasibility study. Although each community was unique in its response to educational needs, high priority common needs included adult and vocational programs.

"As our young adults enter the world of work, they find their training is lacking or their training does not lend itself to employment on the Navajo Nation." (Page 20)

Feasibility Connection

Vocational education that is relevant to Navajos and their employment on the Reservation is a high priority educational need.

The Navajo Nation Overall Economic Development Program

The Office of Program Development, The Navajo Tribe

Window Rock, Arizona

1974

This 155-page document is an analysis and projection of economic development on the Reservation. The graph reproduced as Figure 1 on page 10 provides an overview of the projected employment changes. Listed and described within the Economic Development Program are 79 construction projects underway or planned. The estimated expenditures total 60 million dollars, much of which will be supported by federal funding.

The growth pattern is anticipated to enlarge the private sector, but it is concluded that there are problems and constraints which handicap growth. The barriers include an underskilled labor force whose upgrading into a skilled labor force is inhibited by labor immobility, lack of training opportunities, low educational attainment, and lack of child care services.

Figure 2 on page 11 identifies the economic options available to individual Navajos, and by strong implication points up the need for vocational and work related education.

Feasibility Connection

There is a plan for economic growth of the Navajo Nation. Projections aim at a realistic appraisal of the future and there is a reasonable probability that the economy can and will expand. To be of significant benefit to the Navajos, the underskilled labor force must be trained, training facilities must be provided, and labor immobility must be overcome.

The Navajo Nation: An American Colony

A Report of the United States Commission on Civil Rights

Washington, D. C.

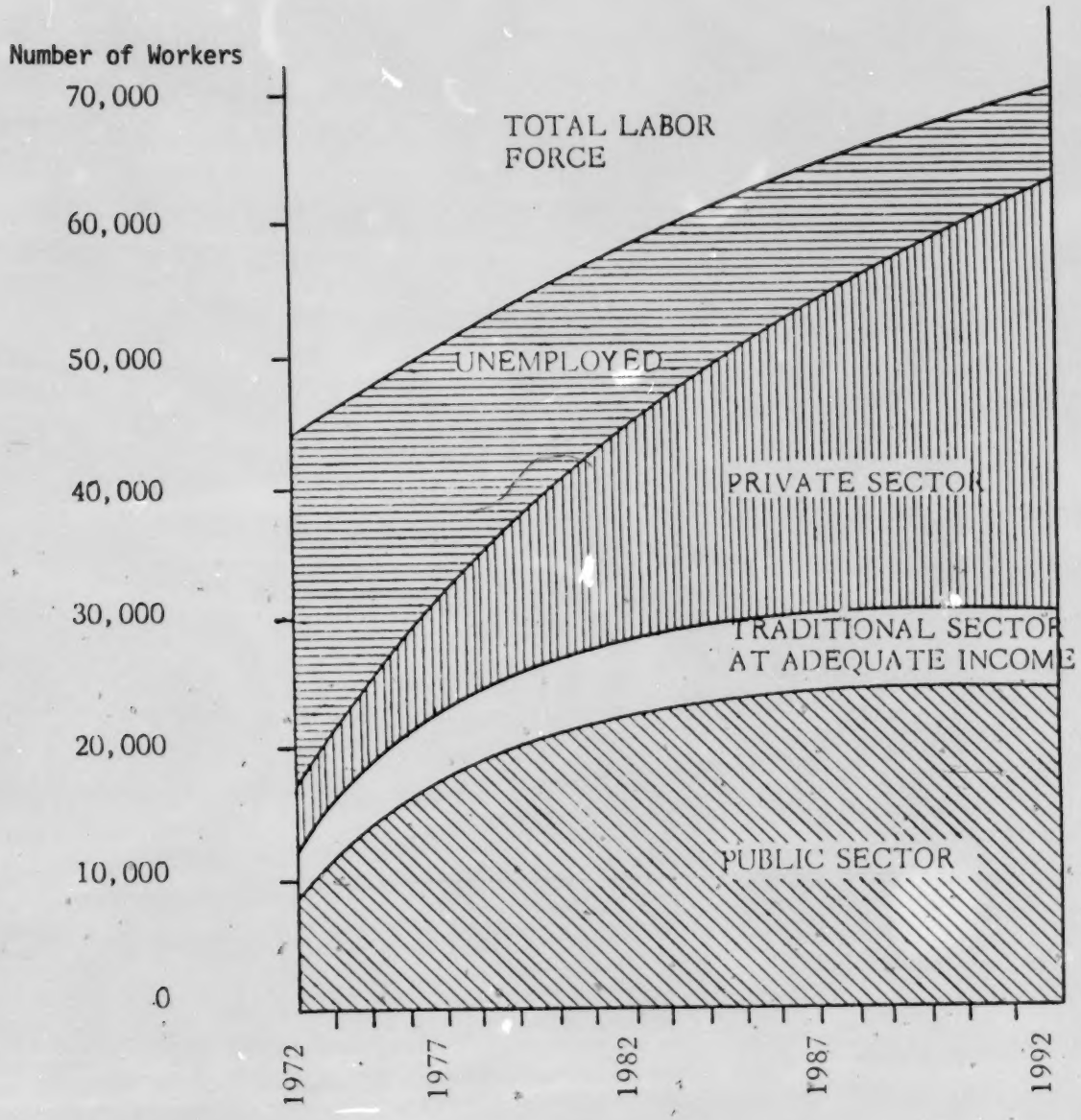
1975

An excellent document on the history, government, and problems of the Navajo Nation. The chapter on education provides valid input for this feasibility study and Figure 3 (see page 12) from the document succinctly and graphically

Figure 1

Economic Development Plan

Changing Composition of the Navajo Economy



Source: "The Navajo Ten Year Plan," p. 8.

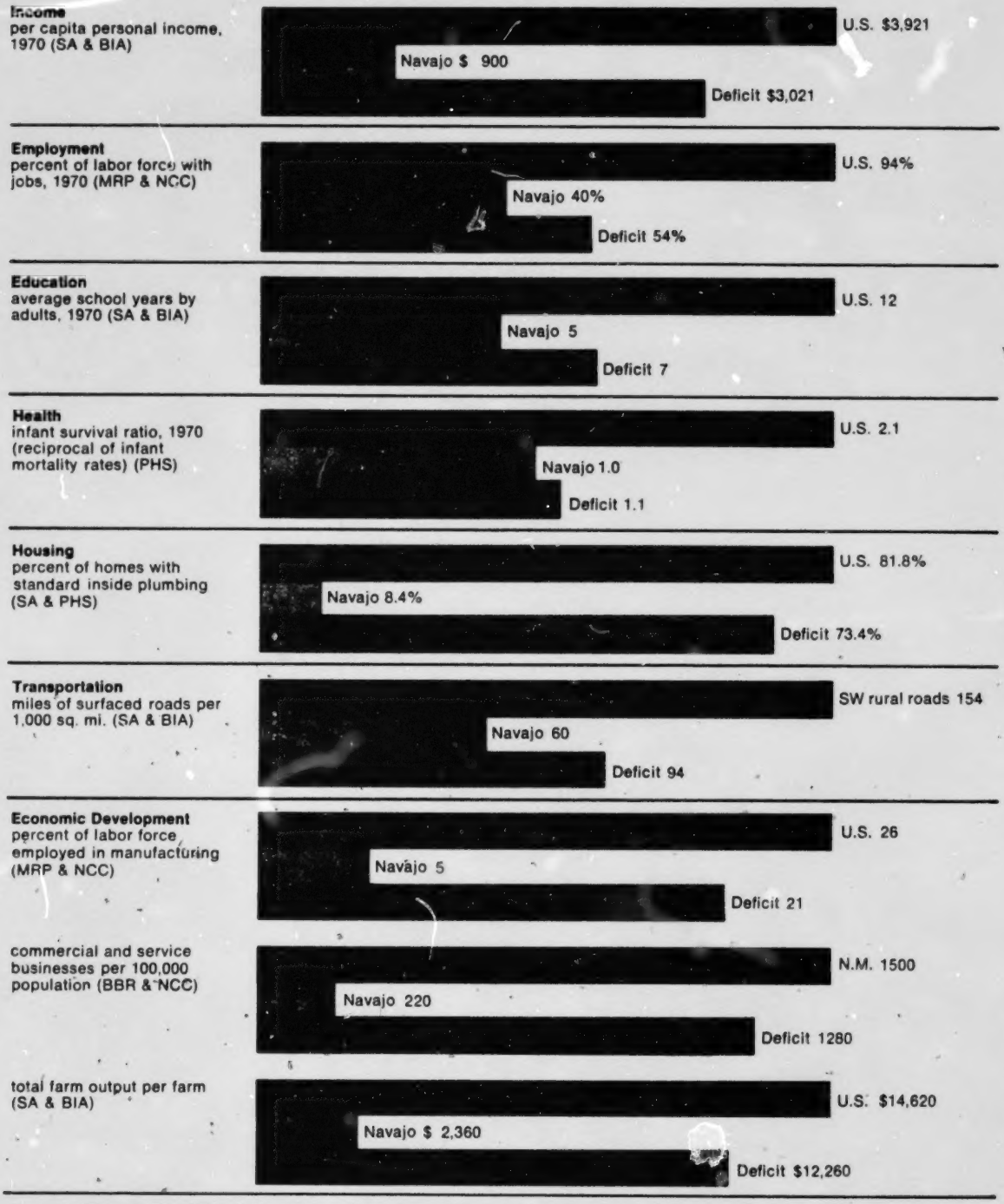
Figure 2
Economic Options Available to Individual Navajos

Style of Life	Location of Employment: On Reservation	Location of Employment: Off Reservation
Traditional	(1) Rapid population growth Land deterioration Widely dispersed population	(2) Seasonal off-Reservation employment Difficulty competing in industrial job market
Modern	(3) High unemployment Underdeveloped infrastructure	(4) Alien environment Strong family ties Difficulty competing for jobs

Source: Office of Program Development

Table 1

NAVAJO CATCH-UP REQUIREMENTS: SOCIAL INDICATORS



Sources for Figure 1: SA—Statistical Abstract of the United States, 1970; BIA—Navajo Area Office, Bureau of Indian Affairs; MRP—Manpower Report of the President, 1971; NCC—Navajo Community College; PHS—Navajo Area Office, Public Health Service; BBR—Bureau of Business Research, University of New Mexico.
Reprinted from the *Navajo Ten Year Plan*, Exhibit No. 11, pp. 500-01

portrays the "Navajo Catch-up Requirements: Social Indicators." The high correlation between education deficiencies and each of the other social indicators supports the commonly documented fact that the higher the education level of people, the higher are other social and personal benefits. The Navajos are low in all areas.

Specifically relevant to this feasibility study are the following:

1. Median education achieved by the adult Navajo is the fifth grade.
2. There is no standard system of education for the reservation: four different systems operate, but without coordination.
3. Bi-lingual education is almost non-existent, but is desired and needed if any educational system is to succeed.
4. Community controlled schools offer a hopeful alternative to the present systems.

Feasibility Connection

The documentation of the very great deficiencies of the Navajo people and their quest for change provides a strong support for community schools that relate education to the Navajo culture and the expressed needs of the people.

Navajo Nation Educational Hearings
Navajo Division of Education
Window Rock, Arizona
1975

The educational hearings were a grass roots inquiry into the educational needs of the Navajo people. Hearings were held in Chapter Houses across the Reservation. Chapter members testified as to current conditions and stated their own needs.

Many needs were expressed. Two of the high priority needs that emerged were: (1) the strong desire for occupational training to help alleviate the high unemployment rate, and (2) the desire for local schools so that students would not have to go to boarding schools or travel great distances over poor roads.

Feasibility Connection

This was a Navajo study of Navajo people and thus reflects directly the educational problems and needs as expressed by the Navajo people. A high priority was placed on vocational education and local schools.

Career Development Master Plan for the Navajo Nation
(Preliminary Proposal)
Foundation for Educational Services
Los Angeles, California
1976

This was a proposal for a six-phase study to produce a comprehensive plan for "career development" education throughout the Navajo Nation. The objectives of the proposed plan were to design more Navajo control and administration, to incorporate skill centers, and to provide skilled personnel to meet the needs of the Navajo employment market.

Feasibility Connection

In August, 1976, a need for career and vocational education was strongly evident, and it was found that no overall tribal plan existed for the achievement of that goal. This master plan provides evidence of concern for vocational education and the desire to plan for its implementation within a broad definition.

People's Forum on Education:
Final Report to the Governor of New Mexico
Steering Committee, People's Forum on Education
Santa Fe, New Mexico
1976

The report included recommendations on various aspects of education in New Mexico. The evidence was derived from an opinionnaire, county records, and a statewide conference at the University of New Mexico.

Vocational education was the sixth greatest area of dissatisfaction and was listed as the number one priority for the use of any extra school money. In

the "Summation and Conclusions" of the report, one of the principal concerns was "the quality of vocational education programs." (Page 23)

Feasibility Connection

The report was requested by the governor, was implemented statewide, and was formally received by the governor. All aspects of education were examined, thus allowing vocational education to compete for attention in the final conclusions and recommendations. The achievement of quality vocational education had a very high priority.

The Structure of Employment in the Navajo Nation

Office of Programs Development

The Navajo Nation, Window Rock, Arizona

1976

This is a statistical report of the employment pattern in the Navajo Nation as of December, 1975. The employment figures were placed in eight economic sectors: (1) agriculture, (2) construction, (3) manufacturing, (4) transportation, communication, and public utilities, (5) wholesale and retail trade, (6) finance, insurance, and real estate, (7) services and government, and (8) mining.

In 1975 there were 20,684 employees on the Reservation, up 8,053 (or 63.8%) since 1969. Navajos employed were 14,797, a gain of 6,388 (76%) over that same time period. Most of the increase in employment took place in construction and public service, and represented temporary, not permanent, jobs. In summary, the report pointed out that the growth in employment indicated progress was made against unemployment. However, only 50% of the Navajo Nation's labor force was employed.

For further economic development, outside capital is needed to create goods-producing industries in contrast to the high levels of employment in education and government which are dependent on taxes.

Feasibility Connection

By implication it can be deduced that the economy will expand into new areas and that Navajos need job training to enter the job market. The job classifications provide a guide for occupational clustering of training programs.

Vocational Education on the Navajo Reservation:
Present Status and Future Directions
R. J. Associates, Arlington, Virginia
1976

This is the most extensive report made on vocational education on the Navajo Reservation. State efforts to provide vocational education for Navajos in the public schools were found to be fragmented, unresponsive to Navajo educational needs, and ill-designed. The same was true for vocational training provided by BIA schools.

On the Reservation, vocational education was found to be:

1. inadequately financed,
2. uncoordinated among local educational agencies and the BIA,
3. unresponsive to labor market demands,
4. lacking in technical assistance for program development,
5. suffering from a shortage of vocational education teachers, and
6. without sufficient interest and resources from the educational agencies.

The main thrust of the recommendations was to establish a vocational education network designed to serve defined geographic needs, including the isolation of many students (only small numbers available at any one location), as well as the need for centralized and coordinated planning to be responsive to labor market and student requirements.

Feasibility Connection

The study supports and encourages the necessity for new directions and programs in vocational education and recognizes the problems of student isolation and the unresponsiveness of vocational education to the job market.

Skills Center Study

Finance/Design/Construct, Inc.
Bloomington, Minnesota
1976

This is a feasibility study that supports the construction of a Navajo Skills Center. The findings and conclusions parallel those of many previous studies, particularly emphasizing the need for vocational training to prepare Navajos for the growing economic developments.

The study recognized the need for every student to have realistic occupational opportunities. A cluster system of vocational education was recommended starting with career awareness in the elementary schools. As students move into skill learning in high school, narrow skill training (e.g., welding) should not be the only learning. A cluster of related learnings should be included.

> Individuals should never be completely obsolete in their career capabilities; they should be able to "move over" to another endeavor within the general area of work.
>
> Since one cluster will have many basic learnings common to another, a school can more economically provide a broader range of opportunities than in a traditional vocational approach. More of the needs and desires of more individuals, as well as the Navajo Nation, will be met. (Page 42)

Feasibility Connection

This study of the need for vocational training for Navajos resulted in recommendations to establish vocational programs to develop a skilled work force among Navajos. Special attention was given to the need for a cluster system of training that provides basic preparation common to different curricula and/or schools.

Economic Development Options Available to the Navajo Tribe

Office of Program Development, The Navajo Nation
Window Rock, Arizona
1976

This document is comprised mostly of statistical information to predict employment needs through 1990 according to optional scenarios for various

occupational areas. The different scenarios (baseline, moderate, or boom growth) show employment growth from 17,000 (1976) to a range of 22,280 to 37,496 within 15 years.

Feasibility Connection

A carefully prepared and well reasoned projection of employment needs for the Navajo Nation. Employment opportunities will increase, most likely at a moderate rate. Flexibility must be obtained in vocational education if it is to prepare Navajos to adapt successfully to the changing--and somewhat uncertain--labor demands of the future.

Development Planning in the Navajo Nation
Office of Program Development, The Navajo Tribe
Window Rock, Arizona
1977

This document is a statement of the need for Tribal initiative in economic planning for the Navajo Nation. The historical documentation of the Tribe's limited role in planning in the past superimposed on today's growing economic developments makes clear that the Tribe is forced to manage for its own best interests the Navajo land, labor, and capital. And, furthermore,

> The Navajo people are now in a position to take the initiative in Navajo economic development to achieve economic independence and full employment on Navajo terms. (Page 15)

Feasibility Connection

Economic planning by Navajos is well on its way, but requires management, skilled labor, and capital to gain the desired goals. The Navajo labor force must be trained to provide the skilled labor component of the economic development plan.

Needs Assessment Survey

Monument Valley High School, Kayenta, Arizona

1977

The purpose of the survey was to assess the need for a Heavy Equipment Operation Program in the Kayenta School District. Information obtained did not support the need for the training program at Kayenta, but did indicate a need for higher quality learning in the three R's as they relate to vocational and technical jobs, and that more understanding of work ethics and attitudes is required.

Other conclusions were as follows: (1) more vocational education is desired, (2) vocational training should include components of basic skills common to the technical occupations, and (3) curriculum should focus on occupational clusters.

Feasibility Connection

The results and recommendations supported the need for expanded vocational education, while rejecting the proposed single occupation program. The use of vocational training common and basic to various occupations was recommended.

Vocational Education Plan of the Navajo Nation

Navajo Division of Education

Window Rock, Arizona

1977

This plan represents the direction taken in 1977 by NDOE to provide vocational education for the Navajo people. The plan was approved by the Tribal Council to establish the Navajo Regional Vocational Institute (NRVI) with administrative headquarters in Ganado. Limited staff was employed in the fall of 1977 and housed in a newly purchased mobile building that was located in Ganado.

The approval of the plan and establishment of the Institute was the culmination of four years of study, review, and recommendations. The plan includes supporting data of the need for vocational training.

One feature of the plan was the establishment of satellite centers in various communities throughout the Reservation, using existing facilities where possible. The plan did recognize the importance of continuing review and evaluation to determine new directions that might be effective.

Feasibility Connection

Vocational education is now a very active component of Navajo education. Better ways to provide youth and adults with quality training are sought and suggested.

Summary of Feasibility Connections

The following six major points are clearly evident from the results of the seventeen studies reviewed.

1. In thirteen of the studies, vocational education and manpower training were specifically noted as a high priority need for the Navajo.
2. Economic growth is increasing and must continue to increase if the Navajo Nation is to become economically sound.
3. Economic growth that will benefit the Navajos must utilize the Navajo population as the major source of employees.
4. Without vocationally trained Navajos, economic growth will be hindered.
5. Creative and flexible approaches to vocational education are needed.
6. The concept of cluster and basic training in vocational skills was perceived as a valid and significant concept on the Reservation.

Feasibility Statement

The economic requirement of a trained labor force demands vocational programs to qualify the large number of unskilled Navajos to effectively compete in the present and future labor market. The expansion of the economy is limited by the available skilled workers. Economic motivation is a support and pressure for vocational education.

Previous studies found that vocational education for Indians is weak in content and methodology. Creative approaches to vocational education are necessary including the concepts of both cluster and basic vocational skill training.

CHAPTER III

COMMUNITY SURVEY OF VOCATIONAL-EDUCATIONAL NEEDS

Survey Purposes

The purposes of the Community Survey, which was conducted as another key component of this feasibility study, were to:

1. compile demographic data on the potential school population;
2. determine youth and adult preferences for instructional content and methods which the school could present;
3. discover priorities for learning outcomes which students could achieve at the school;
4. compile a list of job preferences that should be considered in planning the school's instructional program; and
5. identify the community interests in receiving more education, particularly through vocational education classes.

The data collected through survey responses to items related to the above areas were needed to provide the feasibility study with information concerning the following conditions:

1. nature of ethnic groups in the potential school population;
2. current and desired educational level of community;
3. learning conditions that are perceived as being effective for this population;
4. learning outcomes the community expects the school to help youth and adults achieve;
5. jobs preferred by potential students;
6. instructional content that is preferred;
7. job aspirations of community residents; and
8. support for a local school

Survey Instrument

A structured community questionnaire appropriate for an interview setting was designed to collect information in the above areas. The population of respondents included all persons in the community who would be eligible to form the school's student population. Since this included all persons 15 years of age or older, a "family interview" procedure was selected as the method of administering the survey.

The family interview questionnaire was developed from a variety of resources. On a subcontract with NDOE, the American Institutes for Research (AIR) developed the basic format and general approach. In an effort to phrase the questions properly and to determine the relevant questions to ask, a study was made of the educational and cultural backgrounds of Indian Tribes. The first draft of the questionnaire was reviewed by Navajos from NDOE and by residents of the Town of Navajo where the questionnaire would be administered.

Revisions were made based on the above review process and the second draft was presented to the Navajo Community School Research Advisory Committee. Various suggestions led to a third draft which was pilot tested with 7 Navajo families. A few minor changes in the content and wording resulted. The time required to administer this draft of the interview questionnaire proved impractical at one and one-half to two hours. Therefore, the questionnaire was restructured into two comparable parts: Form I and Form II. This decision permitted each form's interview to be completed in approximately one hour.

A final review of the intrument's fourth draft was made by the study's Research Advisory Committee, and with only one or two word changes the questionnaire was printed for use by the interviewers. A copy of each questionnaire is displayed in Appendices A and B.

Sections A and D of the questionnaire are included in both Form I and Form II. Section A elicits data on each family and Section D covers preferences for curriculum and involvement in the proposed community school. Sections B and C deal with learning preferences and teaching methodology and are included only in Form I. Sections D and E which address career education needs and job preferences are included only in Form II.

Instrument Administration

Interviewers who were easily bilingual in Navajo and English were required, since many adults in the proposed interview population spoke little or no English. The selection was made from persons living in the Town of Navajo and the surrounding areas that will be served by the proposed community school. Initially ten persons agreed to participate, and training sessions were held prior to starting the survey, followed by periodic meetings during the interviewing.

These interviewers, predominantly members of the Navajo Tribe, received training from three AIR representatives. The training sessions focused on the instrument content, format, and procedures. They culminated with role play interactions between the interviewers so that their administration procedures could be monitored and any implementation problems could be resolved. Administration in English and Navajo was practiced and the interviewers used group consensus to select the most appropriate translations for the English version.

Survey Respondents

With more than 600 households within the target area, an ambitious goal of interviewing all families was attempted. It soon became evident that the goal of 50 to 60 interviews by each of the ten interviewers would not be accomplished. Winter weather of cold and snow interrupted. Reports from interviewers indicated difficulty in getting an hour (the approximate time of each interview) with many families. Some families would schedule a time, but then, for various reasons, would request a re-scheduling.

Five of the interviewers were able to follow through well and in the long run accounted for the majority of interviews. Some interviewers gave up; while others promised to do better, but accomplished little. Two additional interviewers were employed, one of whom made a few interviews.

As the above pattern emerged, it became obvious that the random sampling would be necessary. A list of all homes in the Town of Navajo with the names and addresses of the residents was secured. By using a random numbers table, project staff selected 190 out of 640 homes for a 30% sampling. Eventually 154 families--24% of the total--were interviewed. Forms I and II of the survey

instrument were administered alternately to the families within this sample. As a result, 24% of the family target group responded to sections A and D (comments on both forms) and 12% responded to the other form's specific sections.

The procedure for each interview was for the assigned interviewer first to make an appointment with the family when all persons 15 years or over were expected to be at home. This was not always possible, and even, when made, did not always work out. The interviewers found that arranging for the interview on short notice often worked best. Frequently more than one attempt was necessary to accomplish the task.

In the actual interview, the instructions were given to the family as a group. As required, each member of the family answered for him or herself. The question of peer or family pressure on each other to bias answers was discussed both before and during the interview phase of the project. Members of the advisory committee and interview team gave assurances that cultural traits would not inhibit individual and differing answers. Interviewers reported that they felt each person responded from his or her own point of view. The recorded responses themselves showed a pattern of variation within most families.

However, as noted elsewhere in this report, there was a central tendency toward a predominant response by all persons. As a result, the responses produced a cultural norm in most instances. There were a few notable differences--and a number of small ones--among the four categories within the family, i.e., father, mother, other adults, and high school age children.

The summary of the survey responses which follows includes the demographic data (expressed in percentages) on all families interviewed. Except for the demographic data, other interview responses represent the consensus of all respondents. Although there were minor differences between father, mother, other adults, and high school age children, these were too small to report in all but three instances which are noted in the summary.

Survey Results

Quantifiable responses to the community survey were hand tabulated and then converted to either percentages or rank order for the summary report. In the following sections, the resultant data are presented for each interview

question. Also reported is an analytical summary of interviewee responses obtained from the request for "critical incidents." Examples of critical incident statements made by respondents are included.

The findings reported in this chapter represent, in essence, a composite assessment of the educational-vocational needs of the Navajo community. At the end of the chapter, these findings are summarized in two ways: first, as a set of major conclusions and recommendations; and second, as "Feasibility Connection" and "Feasibility Statement" which provide the input from the community survey that relates directly to this report's concluding feasibility statement contained in Chapter VI.

Background Information on Interview Process and Interviewees. The following list summarizes the most pertinent information for understanding the interviews and the families interviewed. Assuming that a representative sample of families was contacted, the project staff believes this list provides important background data for the subsequent program planning tasks of the proposed community school.[1]

1. Over 70% of the interviews were conducted entirely (16%) or partially (56%) in the Navajo language.

2. A total of 87% of the interviewees were Navajo, 7% were Anglo, 6% were members of other Indian tribes.

3. Regarding the educational levels of adults interviewed

   16% had completed less than the 4th grade - of the remainder:
   7% had completed 4 through 6 grades
   11% had completed 7 through 9 grades
   35% had completed 10 through 12 grades
   15% had completed 13 through 15 grades
   11% had completed 4 or more college years

4. The daily activities of the four types of respondents were as follows:

   Fathers

   86% worked full time away from home
   2% worked part time away from home
   12% remained at home
   0% attended school

[1]Percentages shown omit the "no responses," thus do not necessarily total 100%.

Fathers (continued)

66% desired to work full time away from home
11% desired to work part time away from home
12% desired to remain at home
8% desired to attend school

Mothers

43.5% worked full time away from home
5% worked part time away from home
50% remained at home
1.5% attended school

37% desired to work full time away from home
11% desired to work part time away from home
32% desired to remain at home
20% desired to attend school

Other Adults

58% worked full time
5% worked part time
32% remained at home
5% attended school

26% desired to work full time
10% desired to work part time
32% desired to remain at home
32% desired to attend school

Children aged 15-19

5% worked full time
2% worked part time
15% remained at home
78% attended school

25% desired to work full time
4.5% desired part time work
1.5% desired to remain at home
69% desired to attend school

5. The interviewees reported that they represented the following Indian chapters:

80% of all persons over 19 belonged to a total of 44 different tribal chapters.

26% of those persons belonged to the townsite chapter of Red Lake while 13% belonged to the nearby Sawmill and Red Lake Chapters. The remainder were distributed among 41 chapters with Fort Defiance and Kinlichee being most represented.

6. The respondents, with help from the interviewers, assessed themselves as having the following language proficiencies:

   80% of the adults and 60% of the high school youth believed that they spoke Navajo well.
   25% of the adults and 18% of the high school youth reported that they read and wrote some Navajo.

   70% of the adults perceived themselves as reading and writing English well, while 78% of them believed they spoke English well and 17% reported they spoke English somewhat proficiently.

   100% of the high school youth perceived themselves reading, writing and speaking English well.

   60% of all respondents said they did not read or write Navajo while 13% said they did not read or write English.

   10% of adults and 23% of high school youth stated that they did not speak Navajo.

Learning Methods. The interviewees were asked to indicate their preferences for various learning methods. The following list presents the ranked order of the responses from all groups of interviewees. The highest ranked methods are presented first.

1. Receive on-the-job training.
2. Talk with people who know about schools, jobs, and the community.
3. Participate in group discussions or projects.
4. Study first, then practice doing.
5. Attend field trips.
6. Discuss individual progress with peers or staff members.
7. Attend lectures.
8. Use teaching machines.
9. Observe others and practice what they do. (This preference was ranked third by youth.)
10. Do first, then study.
11. Go to school with both youths and adults.

Learning Materials. Next the interviewees were asked to indicate their preferences for different types of learning materials. The ranked order, once again beginning with the highest priorities, is as follows:

1. Use tools.
2. Use library materials.
3. Use art or craft supplies.
4. See films or slides.
5. Use text books.
6. Use playback audio and video tapes.
7. Use programmed materials.
8. Listen to radio and recordings.
9. See television programs.

Learning Conditions. When asked to indicate their preferences for various conditions that influence their learning, the interviewees produced the following priorities:

1. Have the school in the Town of Navajo.
2. Cooperate with other students in learning activities.
3. Learn English.
4. Progress at my own rate.
5. Be evaluated by taking tests.
6. Compete with others.
7. Learn in Navajo.
8. Be evaluated by means other than tests.

Teacher Characteristics. Respondents from all groups expressed the following preferences for the types of teachers they found most helpful:

1. Teachers who know their subjects and explain them clearly.
2. Teachers who relate well to young people.
3. Teachers who maintain strict discipline.
4. Teachers who know Indian cultures.
5. Teachers who are Navajo.
6. Teachers who are not Navajo.

The following additional characteristics were listed as desirable by some of the interviewees:

1. Teachers who teach in both Navajo and English.
2. Teachers who can say "I don't know" and then find out.
3. Teachers who are enthusiastic about their subjects.
4. Teachers who do not underestimate their students.
5. Teachers who are fair and do not discriminate or show favorites.

Job Awareness Needs. The sample indicated that they needed help in the following ranked areas in order to be more capable of dealing with the world of work:

1. What jobs I could do well.
2. About many different jobs.
3. Jobs I would like to do.
4. How college relates to jobs.
5. What it is like to work with people.
6. Things, other than money, I can get from jobs.
7. How much jobs pay.
8. What it is like to work off the reservation.
9. What it is like to work.
10. How to deal with unemployment.
11. How to improve in my present occupation.

Job Planning Needs. Priority needs in the area of making decisions about jobs are listed below:

1. Learn what jobs are available to me.
2. Plan a program of courses to help me get into the school or job I want.
3. Find out where I can get money to help me go to school.
4. Find out where I can get vocational training for the job.
5. Plan several options in case one job does not work out.
6. Decide what job I want to seek (this need was ranked first by youth).
7. Talk to someone at school to help plan my future (this need was ranked second by youth).
8. Find out who can help me find work.
9. Explore one job very carefully.

School Performance Needs. When asked to prioritize the factors that would most help them perform better in school, the interviews produced the following ranked needs:

1. Get specific training for the job I want.
2. Improve my ability to read, write, and speak English.
3. Improve my ability to read, write, and speak Navajo.
4. Stay rested and healthy.
5. Study better.
6. Learn basic skills in math.
7. Find a place where I can study better.
8. Become more comfortable when speaking in class.
9. Complete assignments on time and follow a study schedule.
10. Hear and remember better what the teacher says.
11. Know what the teacher expects me to learn and do.
12. Get more personal help from the teacher.
13. Learn how to take tests better.
14. Learn basic skills in science.
15. Deal with bad feelings about school and boredom in school.

Job Getting and Maintaining Needs. In regards to how to obtain and keep jobs, the following needs summarize those with which respondents acknowledged that they needed help:

1. Learn what is expected of me on the job and why.
2. Get along well with co-workers and supervisor.
3. Understand the impact of my attitudes toward work.
4. Learn where to look for job openings.
5. Learn how my job fits into the work of the community.
6. Get to work regularly and on time.
7. Learn how to fill out job application forms.
8. Be able to influence the way and the place that I work.
9. Learn how to act during job interviews.

Job Preferences. The following list represents the order in which interviewees indicated the jobs which they would most like:

silversmithing
auto repairing
weaving
welding
accounting
teaching
stock raising
building construction
small business management
road construction
nursing
bookkeeping
secretarial
forestry work
cashiering
electronics
law
medical assistant
pottery making
sawmill work
baking
laundry cleaning
production of sheep by-products
food processing
metal working
dental assisting
radio and TV repair
doctor
farming
homemaker
teacher assistant
beautician
selling
social worker
restaurant
psychologist
banking
hotel management
leathercraft
architecture
veterinarian
janitor
policeman
iron worker

Amount of Support for Various Learning Factors. When asked whether they favored the teaching of Navajo culture, 98% of the interviewees responded affirmatively. As for the teaching of specific aspects of Navajo culture, the following results were obtained:

history	95%	literature	82%
traditions	95%	religion	79%
crafts	91%	music	69%
art	82%	dance	51%

In addition, interviewees added the following instructional topics:

language
silversmithing
Navajo cooking
weaving
Navajo clans
Indian clubs
life stages
Medicine man

The degree of support for other academic subjects was as follows:

English language	98%	biology	89%
basic math	96%	art	88%
physical education	95%	geometry	87%
algebra	94%	chemistry	82%
Navajo language	92%	physics	84%
English literature	92%	music	83%
general science	89%	Navajo literature	83%

Other subjects added by individual respondents included:

- speech - advanced math
- natural resources
- home economics
- American history-social science
- sex education
- Spanish and other languages
- Indian psychology
- reading

A total of 16 additional write-ins referred to vocational subjects.

Interviewees indicated the following levels of support for other functions of the school complex:

library	92%	typing and bookkeeping service center	85%
community center for meetings	90%	health care	72%
job placement center	87%	child care center	72%
marketplace for student crafts	85%	restaurant	63%

They also made these suggestions:

- theater and recreation center
- bank
- study hall
- barber shop
- radio station
- bookstore
- garage for repair work

When they were asked to indicate if they needed or wanted more education, 88% of the mothers, 82% of the fathers, and 75% of the other adults (for an average of 84% of all adults) responded affirmatively. Then, when they were asked if they would go to Navajo Community School, 88% of the mothers, 82% of the fathers, and 76% of the other adults (for an average of 85% of all adults) responded "yes." The percentages of persons who indicated they were willing to work off the Reservation are displayed below:

	YES	NO	NOT SURE	NO ANSWER
Mother	32%	45%	19%	4%
Father	36%	41%	18%	5%
Other Adults	49%	33%	5%	13%
Youth	40%	14%	8%	38%
All	37%	36%	15%	12%

Analysis of Critical Incidents

During the community survey, each interviewer asked family members to describe two types of critical incidents. A critical incident is a documented event from an interviewer's experience which she or he feels was very important for her or his development. Part of the documentation must also include an explanantion of why that incident was so important.

The first type of incidents that was requested concerned learning materials, methods, conditions, teacher characteristics which were particularly effective or ineffective for the respondent. The second type focused on incidents which occurred on the job where the interviewer felt she or he performed particularly effectively or ineffectively for some identifiable reason. For example, family members received the following instructions when asked to consider the second type of incident:

> I would like each of you who has worked at a job outside the home to think of a time when you were working and you performed on the job successfully for some reason: your supervisor was good at explaining things, you were especially careful in checking quality of what you did, the working conditions were good, etc., and both you and your employer were satisfied. As before, I'd like to write down any incidents that are important to each of you. Let's go one person at a time.

Incidents for youth and adults did not differ in major ways, therefore no attempt was made to separate these examples on the basis of respondent age. A total of 25 usable incidents involving examples of effective learning experiences was collected, analyzed for content similarities, and classified into related categories. Since 2 of these fitted more than one of the resulting categories, 27 such incidents were classified. On the other hand, 36 usable examples of ineffective learning factors produced 42 incidents because 6 were grouped into more than one category. Not enough usable incidents related to job performance were identified so classifying them was impossible.

Incidents Describing Learning Factors. Four major themes are apparent in this type of incident. First, the majority of these incidents reflected a serious concern about learning. Most respondents wanted to learn or wished they had been able to learn, and were disturbed when situations in or out of school prevented them from doing so.

Second, it is obvious that the most important effect on learning was seen as the teacher. In fact, 68% of the incidents of effective learning and 53% of the incidents of ineffective learning involved teacher characteristics and/or behaviors. Clearness in presentation of materials, willingness to go over and over material until it was thoroughly understood, and willingness to give individual help were mentioned frequently, as was teacher interest in the subject taught and in the students. The opposites of these behaviors--inadequate presentation of material, lack of interest in subject or students, and unwillingness to help individuals--were the teacher characteristics which most bothered students. Some apparent contradictions appeared in the types of behaviors which proved effective: both strictness and easygoingness got high marks (perhaps because both are effective in different aspects of learning). In respect to importance of the teacher, Navajo students did not appear to be different from students of other cultural groups, except that perhaps the individual teacher was perceived as being even more important to them as they work at mastering material based on cultural foundations and assumptions that differ from their own.

In the third important area, learning methods, it is apparent from both the effective and ineffective incidents that "hands-on" or active learning was seen as being very important. Also, learning experiences needed to be tailored to the significant religious/cultural aspects of the Navajo tribe: if cutting up animals is forbidden by the Navajo religion (as it is), then dissection in biology class is an ineffective technique for teaching Navajos.

A fourth major theme is found in the incidents of ineffective learning. This entails conditions outside class. The majority of these incidents reflected an inability to attend school because of long distances from it, a need for the student's labor at home, or conditions of poverty that prevented attendance. Again, most respondents seemed to want to go to school and get the best education possible; some mentioned that their basic motivation was to learn skills that would help them get a good job.

A detailed analysis of critical incidents on learning influences is presented in Appendix C. There incidents are quoted exactly as recorded by the interviewers in order to express the flavor of what the respondents actually said. Note that two incidents are from Anglos living on the reservation, but that these express attitudes also presented by Navajos and members of other tribes. The only instance in all these incidents where an Anglo expressed an attitude not seconded by Indian respondents was one in which the value of a strongly competitive situation was discussed.

Incidents Concerning Job Performance. Even though critical incidents of this type were too few to be classified, some general themes existed. First, respondents had a general attitude of concern when their job performance was substandard. Most seemed to want to succeed in what they did and were distressed when they did not succeed.

Second, many incidents mentioned the need for more training in specific job skills, job-related areas, or general education. Many of these examples suggested that the respondents wished they had learned more and now wanted to learn needed skills. Several persons mentioned the need for what we call "job survival skills," i.e., the ability to succeed in a job environment over and above possessing actual job skills. Examples include learning to get along with co-workers and learning to keep to a schedule when necessary. Third, the learning situation which appeared most frequently in incidents of successful job performance was on-the-job training. Finally, several incidents mentioned the need for training in safety procedures related to specific jobs.

These incidents are highly correlated with the learning incidents discussed earlier. The most noticeable component of effective job performance was adequate learning and the most noticeable component of ineffective performance was inadequate learning, according to these repondents.

Feasibility Connection

The following list summarizes some of the results which are most pertinent to the purposes of this planning study. At least to the extent of the information identified in the community survey, these items outline some of the basic demographic characteristics, needs, and preferences of residents of the Town of Navajo.

1. They are predominantly Navajo.
2. They belong to and vote at 44 different Chapter Houses throughout the Navajo Nation.
3. Their educational level is higher than is that for the reservation as a whole.
4. Their employment rate is higher than is that within the reservation.
5. Many persons working full time away from home would prefer home-based work.

6. Most residents are orally bilingual in Navajo and English; a few speak only one language.

7. English is the language of reading and writing; only a few read and write Navajo.

8. Even though their employment rate is high, the concern for jobs and job training is their number one educational priority.

9. When asked to rate different learning methods, they gave high priority to group activities and learning by doing.

10. Similarly, learning by study before doing is very important to them.

11. They emphasize understanding and knowing themselves, receiving individual respect, and having opportunities for personal growth.

12. Generally, they prefer "home occupations" over work in business, government, or industry.

13. They express strong support for: (a) acquiring vocational education; (b) academic subjects; (c) learning Navajo culture; (d) using a school complex for community functions; and (e) receiving adult education.

14. At least 85% of them desire more education and state that they would attend a local community school.

15. Less than 40% of them are willing to work off the reservation.

16. They identified having a community school in the Town of Navajo as the highest ranking response in the survey.

The above findings and other survey data have the following implications for the feasibility of vocational modules:

1. Vocational education was greatly desired. Respondents gave a high priority to acquiring job related skills and getting jobs.

2. There was consensus that a vocational/academic school should be built in Navajo. However, it should be recognized that with a total enrollment of between 350 and 500 youth and adults, the number of vocational programs at this school would have to be limited by the number of available students.

3. Students at such a school will be primarily Navajo. Since 87% of the population is Navajo, educational programs must be most responsive to Navajo cultural values and needs.

4. Learning by doing was ranked as the most important educational method. Although both the responses to the short answer items and the critical incidents indicated that knowing about something before doing it was important, the actual performance of tasks was rated as the best way to learn.

5. Over one-quarter (30%) of all high school age youth desired to work rather than attend school. This finding could be seen as indicating that the present educational curricula and methods are inadequate for youth needs. Vocational programs that provide work experiences--and motivation--should be more likely to keep youth in school.

6. There was strong desire for adult education. Although only 70% of high school youth preferred school over work, adults rated educational achievement as very important. This was reflected in the preferences of adults to attend school and was strongly supported by the "concern about learning" that emerged as a major theme from the critical incidents.

7. A wide variety of job preferences was identified. When each respondent ranked his/her five most desired jobs, 44 jobs had more than one response. The number and variety of these desired jobs precludes specific training in most. Therefore, the concept of vocational modules on common vocational skills is supported, if basic vocational skill training is to be provided for most or all of these desired occupations.

Feasibility Statement

As indicated above, the Community Survey has identified important elements that support the feasibility of providing vocational modules for presenting training in skills that are common to numerous occupations. The above feasibility connections make it clear that education with a strong emphasis on vocational education both for content and method (learning by doing) is of great importance. In addition, motivation to participate in vocational training programs is high. It appears that a community school should be built in Navajo to provide a facility to meet the needs for vocational, academic, and cultural education; community services; and adult education.

Although the percentage of persons needing and wanting vocational education is high, the actual number of persons available within the community is too limited to support a large number of separate programs. This is also reflected in the small numbers of persons who selected each job choice. Vocational education must seek an alternative to the "unit shop" concept.

Learning by doing was rated very high in a number of different contexts. This response coupled with the highest priority of all--a local school--supports the necessity of vocational training as a method important to all learning. In addition, the vocational curriculum should be structured as a method to enhance the attainment of other educational needs.

Since nearly 90% of the potential students are Navajo and survey responses indicated that cultural values are important, this means that with the strong desire for job preparation there must be developed a vocational curriculum that is compatible with cultural values. Bilingual and Navajo cultural education should be employed as an inherent part of the total community school plan.

CHAPTER IV

EMPLOYER SURVEY

Survey Instrument and Procedures

The population within the geographic area on which this project focused is sparsely distributed and is even more so within most parts of the Navajo Nation. As was noted in the preceeding two chapters, both local schools and vocational education have been established as high priorities for the Navajo people. However, specialized vocational training programs (e.g., electrician, dental assistant, etc.) require a strong job market to support the cost of a one-occupation training effort. Sufficient numbers of students must also be available. Without these two ingredients, single occupation programs are not economically practical. What, then, are the alternative training approaches? Are there some occupations with enough employees to warrant a corresponding occupational program or cluster? Are there basic vocational skills that are sufficiently common to a number of occupations to warrant a training program addressing only those skills? If a survey were conducted to help identify such skills, would the data obtained also suggest some new approaches to vocational education?

These were the questions that led us to design and implement our feasibility study's third data source--a survey of employers in geographic proximity of the Town of Navajo. More specifically, the purposes of the Employer Survey were:

1. to determine the employment statistics for the geographic area;
2. to identify what jobs exist;
3. to determine most important tasks necessary to perform each job; and
4. to determine the importance of performing each task as a hiring requirement.

We knew that if key entry level tasks were identified by the employers, we could analyze the task descriptions to determine what, if any, skills were common prerequisites for their performance.

The survey questionnaire (see Appendix D) was relatively simple, requiring the identification of the employer, number of employees by sex and ethnic group,

job titles, and number of employees now and in the future for each job, training preferences, and important tasks required for each job. Task descriptions were requested by an open-ended question. This approach was used for two reasons. First, to encourage responses in which employer representatives would identify those tasks they perceived to be the most important to perform their jobs and that if possessed by a worker would make him or her competent to compete effectively in the job market. Second, to avoid asking interviewees to respond to a predetermined taxonomy of tasks with which they did not agree.

Nearly 100% of the employers in the Window Rock, Fort Defiance, and Navajo communities were interviewed. This community complex comprises the major living/working area for this part of the Navajo Reservation and would provide all jobs for vocationally trained persons without their moving to other communities or commuting for considerable distances.

Two professionally trained resident Navajos (one male and one female) who were bilingual were available for the summer months of July, August, and early September. They contracted to do the employer interviews. They made and fulfilled their interview appointments with minimum difficulty. In most instances, they recorded the answers as supplied by the employer. In eliciting the list of "important tasks," they were able to probe for and stimulate appropriate detailed responses. By working cooperatively and following the procedures outlined in the survey questionnaire, these two interviewers were able to standardize their presentations in a fairly consistent way.

Large employers--tribal government and two of the tribal enterprises--were interviewed department-by-department. In some instances interviewers were given office space and remained on site for as many days as the interviews required. In some instances self-employed persons or employers with only a very few employees were left questionnaires to be filled out as time permitted. In these instances, the interviewer returned to review the completed form and to resolve any problems before the form was submitted for data analysis.

One other method of securing job task data was used. Some employers had sufficiently detailed job descriptions that provided a list of important tasks for specified job titles. In such cases, the interviewer transcribed these records onto the appropriate survey forms.

In the beginning some reluctance to cooperate was evidenced by representatives of one or two tribal agencies, usually expressed by statements such as "I am too busy." A letter from the Tribal Vice-Chairman assuring the agency

manager of the validity and importance of the survey eliminated those few problems.

On the whole, this part of the research went well, but did take longer than had been scheduled. However, the end result was a successful and complete display of the anticipated information.

Survey Results

The structuring of the survey data for purposes of analysis required two separate approaches. The descriptive data concerning name of employer, number of employees by sex and ethnic group, job titles, number of present and future job openings, and training preferences were easily hand tabulated. However, the array of job tasks required an interpretive approach to produce comparable data that could be categorized for analysis.

Not all repondents used the same words to describe a common task. Therefore a special, generalized task title was employed to cover a variety of similar subtasks. The predominant example of this is the "common task" category of "observe and record" which includes such subtasks as "inventory," "checks purchases," "classifies," etc.

All tasks, except those in Business and Office and those required of employees of the Navajo Forest Products Industries (NFPI), were categorized as either "common tasks" or "technical tasks." The common tasks were the ones which appeared to require the generalized skills that could be addressed by the vocational modules on which this feasibility study focused. The tasks in this category are listed in detail in the remainder of this chapter. However, the technical tasks are reported by number only since they are, in most cases, individually unique to a specific job and thus are not relevant to the concept of "vocational modules" providing skill training common to multiple jobs.

Business and Office tasks and those required by NFPI were viewed as sufficient in number and importance to require a full vocational program that trains students directly for the available jobs in those areas. Although it would be of statistical interest to have detailed data for these two job areas, sufficient funding and time was not available to do so. A computer based data processing system capable of tabulating and classifying the data would be appropriate to include in future studies of this nature.

A total of 125 "employer units" was contacted in the employer survey. The range of employees per unit was between 1 and 1075, with a distribution as shown in Table IV-1. A total of 5145 employees were identified. The distribution of these persons by sex and Tribal membership is shown in Table IV-2.

A total of 1098 interview sheets was completed listing the most important tasks and skills required for each job identified. All responses were labeled by job title. Then, the titles were separated into the 15 occupational clusters adopted by the United States Office of Education. Table IV-3 shows this distribution.

The largest occupational cluster is Business and Office (417 responses) and, as noted earlier, because of its size we decided that it required a full curriculum to prepare youth and adult students for available jobs. The 550 responses for the remaining occupational clusters, excluding the 131 responses provided by the Navajo Forest Products Industries, were analyzed for common tasks required to perform the various jobs. As a result, 34 task categories were developed from the list of tasks supplied by the interviewees. The list and frequency of responses for each common task category by occupational clusters are shown in Table IV-4. Subcategories were established for the manufacturing cluster which was the second largest occupational cluster. A total of 2022 common job tasks are represented in Table IV-4. That total constitutes 41% of the 4910 tasks which were eligible for this table. The remaining 59% were classified as technical skills. In three of the clusters--Environment, Hospitality and Recreation, and Marine Sciences--there were no jobs reported.

The 1372 technical tasks for the manufacturing cluster are 67% of the 2041 tasks recorded. Thus the 669 common tasks comprise 33% of the manufacturing category. For the remaining 10 clusters there were 1351 common tasks and 1516 technical tasks for a total of 2869. The common tasks thus comprised 47% of the total tasks reported for these 10 areas. Combining the manufacturing cluster with the other 10 clusters produced the 2022 common tasks (41%) of the 4910 total tasks. Table IV-5 showns common tasks for the manufacturing cluster.

Employer interviewees also were asked to note how important they thought it was that each task they listed be acquired before hiring. Table IV-6 summarizes these responses by 11 of the 15 occupational clusters. Omitted from that table are the three clusters for which no job tasks were indicated and for the Business and Office cluster which was not analyzed for common tasks.[1]

[1]For this category 62% of the responses were "Very Important", 31% "Somewhat Important."

TABLE IV-1

Range and Number of Employees Per Employee Unit

Range of Employees by Employer Unit	Number of Employer Units	Number of Employees
1 - 10	71	383
11 - 20	15	225
21 - 30	10	255
31 - 40	8	272
41 - 50	3	136
51 - 60	3	162
61 - 70	1	63
71 - 80	1	75
81 - 90	1	82
91 - 100	0	0
101 - 200	7	1027
201 - 300	2	431
301 - 400	1	355
401 - 500	0	0
501 - 600	0	0
601 - 700	1	604
1001 - 1100	1	1075
TOTALS	125	5145

TABLE IV-2

Employee Characteristics and Openings by Employer Type and Unit

Type of Employer	Number of Employment Units	Number of Employees	Full Time Employees				Part-Time Seasonals	Openings Filled Over Last 12 Mos.	Current Job Openings	New Openings Expected Next 12 Mos.	Employee Turnover Expected Next 12 Mos.	New Openings 12-36 Mos.	Employee Turnover 12-36 Mos.
			Navajo		Other								
			Male	Female	Male	Female							
Tribe	68	3193	1406	1308	194	98	187	739	144	375	446	459	920
Bureau of Indian Affairs	16	307	126	82	65	14	20	52	24	33	23	19	37
Private Business	33	468	126	210	58	33	41	373	26	37	207	74	618
Navajo Forest Products Industries	1	614	573	31	10	0	0	406	0	15	400	20	1000
Misc.	7	563	109	211	121	115	7	78	4	10	66	29	178
Totals	125	5145	2340	1842	448	260	255	1648	198	470	1142	601	2753

TABLE IV-3

Distribution of Job Titles by 15 Occupational Clusters

Occupational Clusters		Number of Job Titles
1.	Agribusiness and Natural Resources	9
2.	Business and Office	417
	a. Accounting/Bookkeeping Purchasing	67
	b. Secretary/Clerk	250
	c. Computer/Keypunch	8
	d. Management/Personnel	32
3.	Communications and Media	11
4.	Construction	73
5.	Consumer and Homemaking	36
6.	Environment	0
7.	Fine Arts and Humanities	7
8.	Health	40
9.	Hospitality and Recreation	0
10.	Manufacturing	362
	a. Automotive	47
	b. Truck Driver/Equipment Operator	18
	c. Semi-skilled/Labor	31
	d. Utility Worker/Maintenance	50
	e. Warehouseperson	20
	f. Custodian	20
	g. Miscellaneous	45
	h. Navajo Forest Products Industries	131
11.	Marine Sciences	0
12.	Marketing and Distribution	25
13.	Personal Services	2
14.	Public Services	110
15.	Transportation	6
		TOTAL 1098

TABLE IV-4

Type and Number of Common Job Tasks by Occupational Cluster[1]

Common Tasks	Occupational Clusters															Total Tasks by Type
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1. Maintains records	3		4	13	14			24		56		13		40	1	168
2. Makes reports	1		5	13	8		2	13		28		4		31	3	108
3. Conducts surveys	4			4										11		19
4. Functions well in meetings	3			9	1			2		9				23		47
5. Observes and records	4		1	22			3	10		81		16	1	39		177
6. Identifies problems	1			2				2		2						7
7. Makes recommendations	1			14	2			4		20		6		33		80
8. Calculates	2		1	39	25		1	12		65		23	1	35		204
9. Maintains public relations	3		7	1	8		4	4		17		4	1	40	1	90
10. Trains persons	1			10	4		2	9		23		1		34		84
11. Supervises employees	1		1	13	5			3		39		6		31		99
12. Interprets tribal codes, policies, etc.	3		1							4		2		7		17
13. Uses bilingual communication			6	2	5			1				1		8		23
14. Uses oral and written communication	1		4	2	17		2	14		44		7		49		140
15. Transmits facts, orders, etc.			2		1			1		1		1		8		14
16. Coordinates			4					3				2		26		35
17. Schedules			2		3			3		22				11		41
18. Interviews			4					6				1		16		27
19. Plans				4	9		1	1		4				21		40
20. Sells, recruits, promotes			2							1		9	1	3		16
21. Creates, develops					6		1	2		1		2		14		26
22. Reads diagrams, maps, blueprints					24		1	5		47				5	2	84
23. Does laboratory work					1			19								20
24. Drives vehicle	1		1	8	8			3		50		2		18	6	97

[1]NOTE: See Table IV-3 for titles of the 15 occupational clusters coded by numbers here.

Common Tasks	Occupational Clusters															Total Tasks by Type
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
25. Maintains motor vehicle			1							2					6	9
26. Works under pressure					2					1		1		2		6
27. Cleans equipment, space, etc.				3	20			10		61		3	2	3		102
28. Uses telephone			2	3	1			2		13		1		9		31
29. Files			2		1			7		6		3		19		38
30. Types							1	3		6		1		22		33
31. Operates cash register					6					9		10	1			26
32. Orders supplies				10				6		54		9		11		90
33. Operates office machines								1		2	1	5		8		16
34. Operates copy machines			1					1		1				5		8
Total Tasks by Occupational Cluster	29	--	51	172	171	0	18	171	0	669	0	133	7	582	19	2022

TABLE IV-5

Type and Number of Common Job Tasks
for Subcategories of the Manufacturing Cluster

Common Tasks	Automotive	Truck Driver Equip. Operator	Semi-Skilled Operators/Labor	Utility Worker Maintenance	Warehouse Person	Custodian	Miscellaneous	Total Tasks by Type
1. Maintains records	16	9	8	8	10	1	4	56
2. Makes reports	5	7	3	6	4		3	28
3. Conducts surveys								
4. Functions well in meetings	1			6			2	9
5. Observes and records	15	0	13	19	19	0	22	88
6. Identifies problems				2				2
7. Makes recommendations	7		4	6	1		2	20
8. Calculates	13		10	22	7		13	65
9. Maintains public relations	9			2	1		5	17
10. Trains persons	2		5	5			11	23
11. Supervises employees	8	1	8	9	4		9	39
12. Interprets tribal codes, policies, etc.				1			3	4
13. Uses bilingual communication								
14. Uses oral and written communication	14	2	2	4	5	1	16	44
15. Transmits facts, orders, etc.			1					1
16. Coordinates								
17. Schedules	3	1		5	6	4	3	22
18. Interviews								
19. Plans					1		3	4
20. Sells, recruits, promotes	1							1
21. Creates, develops			1					1
22. Reads diagrams, maps, blueprints	13	3	11	11			9	47
23. Does laboratory work								
24. Drives vehicle	11	17	1	8	8		5	50
25. Maintains motor vehicle				1	1			2
26. Works under pressure							1	1

Common Tasks	Automotive	Truck Driver Equip. Operator	Semi-Skilled Operators/Labor	Utility Worker Maintenance	Warehouse Person	Custodian	Miscellaneous	Total Tasks by Type
27. Cleans equipment, space, etc.	8	4	6	12	7	20	4	61
28. Uses telephone	1		1	3			8	13
29. Files	2			1	2		4	9
30. Types				1	1		4	6
31. Operates cash register	7		1				1	9
32. Orders supplies	15	1	6	8	5	1	8	44
33. Operates office machines	2							2
34. Operates copy machines							1	1
Total common tasks by subcategory	153	45	81	140	82	27	141	669
Total technical tasks by subcategory	335	108	132	324	33	191	249	1372

TABLE IV-6

Importance of Job Task Requirements Desired for Hiring

Occupational Cluster	Number of Interviewees	Number of Tasks Identified	Importance for Hiring					
			Very		Somewhat		Minor	
			No. of Tasks	%[1]	No. of Tasks	%	No. of Tasks	%
1. Agribusiness	9	84	39	46	43	51	2	2
3. Communications	11	104	85	82	19	18	0	0
4. Construction	73	405	129	32	238	59	38	9
5. Consumer Homemaking	36	364	212	56	109	29	55	15
7. Fine Arts	7	58	35	60	19	33	4	7
8. Health	40	342	250	73	85	25	7	2
10. Manufacturing	275	2311	1314	57	779	34	218	9
12. Marketing Distribution	25	284	151	53	101	36	32	11
13. Personal Services	2	23	12		6		5	
14. Public Services	110	881	458	52	370	42	53	6
15. Transportation	6	54	33	61	14	26	7	13
Totals	594	4910	2718	55	1783	36	421	9

[1]Note: Figures indicate the percentage of tasks receiving each of the three ratings for each occupational cluster.

Two other responses that related to each task were requested. The first one -- frequency of time that each task was performed -- elicited too many obviously invalid answers to be useful. For example, out of 10 tasks listed, two of them would show 50-75% frequency and the remaining eight some lesser amounts, including at least three ratings of 25-49%; all of which add up to more than 100%. The problem was in the manner in which the question was asked. A priority rating system would have been better.

The other response required a rating on a three-point scale to indicate the "quality" of performance required on the job for each task. Apparently, responses here were easily provided by the interviewees. However, no attempt was made to analyze the available data since visual inspection clearly indicated the trends. The top quality rating was circled in the large majority of instances, but a number of responses fell in the second rating category. A very few respondents selected the lowest rating. One person ranked the task of "bi-weekly reports" in this category, which may have signified a cynicism about the report rather than a low rating of the task quality. The conclusion is, obviously, that a high quality of performance is required or desired for almost all job tasks reported here.

Feasibility Connection

All of the above findings have a direct bearing on the question of the feasibility of an optimum set of job tasks for which a series of vocational modules could provide skill training for residents of Navajo and its surrounding communities. The most dramatic fact is that 41% of all listed job tasks fell within 34 common tasks. In other words, a vocational curriculum that addressed those 34 would provide 41% of the important job skills required for most jobs, especially so for initial employment. A second significant fact is that the majority (86%) of the 4,890 full-time employees in the business and agencies contacted are Navajos. This finding highlights the importance of the data on educational curriculum and methods as determined by the Navajo Community Needs Assessment reported in Chapter III. In addition, since 43% of the full-time employees are women, occupational preparation must include representatives of both sexes.

Although the job market is relatively good (with 168 current job openings and an average of 400 new openings anticipated for each of the next three years) unemployment among Navajos and the high turnover of employees indicates

a strong need for sound vocational training both prior to and during employment. In fact, employee turnover is almost three times as great as is the total of new job openings. Of the 5,145 employees, a turnover of 22% is expected. That means that jobs will be available to 1,130 persons.

Not all occupational areas are large enough to justify immediate development of vocational programs specifically for them. But programs are needed to prepare the youth and unemployed to enter the many other diverse jobs. Three occupational clusters (Business and Office, Manufacturing, and Public Services) dominate the job market. In the Manufacturing area, 33% were common tasks.

Finally, the employer representatives indicated that they thought it would be desirable for job candidates to be able to perform the majority of the listed tasks before they entered their job. More specifically, they rated nearly all of the job tasks as either "very important" (55%) or "somewhat important" (36%). They also tended to want a high quality of performance on those tasks.

Feasibility Statement

In respect to the perceptions of employers contacted in this project's survey, it appears that job training prior to employment is a high priority requirement for job placement and retention. This survey's findings suggest that most youth and adults need vocational education.

The pattern of jobs and the sparsity of population support the necessity of as much vocational training as possible on common job tasks. The identification of 34 actual common tasks that comprise 41% of required tasks for jobs identified in this survey provides strong support for the concept of a manageable array of vocational modules. Once each of these 34 tasks is subjected to a systematic competency analysis (to determine the knowledge, attitudes, and performance skills candidates need in order to perform them successfully), learning modules can be tailored to the needs of Navajo youth and adults so they can receive the training assistance they desire for the tasks they select.

CHAPTER V

NATIONAL SEARCH FOR VOCATIONAL PROGRAMS SUCCESSFUL WITH INDIANS

In 1977, the project staff undertook a national survey to identify vocational education programs which had been developed or adapted specifically for use with American Indians or Alaskan Native Americans. The purpose of this search was to identify curriculum resources that could be incorporated into the instructional program of the vocationally based community school tentatively planned for the town of Navajo, New Mexico. To accomplish this purpose, the search was to obtain standard kinds of information on all programs and to prepare a catalog of program descriptions based on that information.

Methodology Used

The staff began by contacting all state directors of vocational education, all research planning units in state departments of education, all regional planning units in state departments of education, all regional educational laboratories, and a few other sources in an attempt to identify such programs. Staff members also searched relevant journals, by computer and by hand. Finally, they followed up all possible sources of information identified in NDOE publications or by knowledgeable persons in NDOE or persons otherwise connected with the Tribe.

From these sources, a few programs fitting the above description were found. Also identified were the most likely sources to contact during the next phase that entailed the actual gathering of information on programs. The same information was sought from each program via a questionnaire concerning specific program aspects. The mailing of the questionnaire took place in June of 1977, with follow-up letters sent out in early July.

A total of 109 questionnaires were sent out and 43 responses were received (39% response rate). Nine of the responding programs were not included in the catalog, either because information on them was insufficient or because the programs began operating after October 1976. This cut-off date was chosen in order to insure that programs described in the catalog had been in operation long enough to provide interested persons with information on program operations and effectiveness.

Because of the relatively small number of programs identified, only three criteria were used for inclusion of programs in the catalog. These are as follows:

1. The program must have been designed to teach one or more of the following skill areas:

   - job awareness skills (for example, knowing about many different jobs, knowing about one's own abilities and interests, knowing job salary levels, etc.);
   - job planning skills (for example, deciding what job to seek, planning an appropriate high school program, finding the most effective kind of job training, finding agencies which can help in placement, etc.);
   - school performance skills (for example, improving communication skills in one or more languages, performing basic math and science skills, studying more effectively, dealing with negative feelings about school, etc.);
   - job getting and maintaining skills (for example, looking for appropriate job openings, filling out job applications, participating in job interviews, getting to work regularly, getting along with co-workers, influencing the work environment, etc.); and
   - job skills (actual vocational skills).

2. The program must have been developed or adapted specifically for use with American Indians or Alaskan Native Americans.

3. The program must have been in operation since October 1976 or earlier.

Summary descriptions of the 34 programs which met these criteria are presented in the catalog entitled Catalog of Vocational Education and Related Programs Designed for Instruction of American Indians. The catalog is printed as a volume separate from this final report.

Because of the fairly poor response rate of returned questionnaires, some potentially relevant programs were undoubtedly not included in the catalog. Programs from Sherman Indian High School, Haskell Indian Junior College, the Institute of American Indian Arts, and the Southwestern Indian Polytechnic Institute, for instance, to name only a few likely possibilities, could probably have provided valuable information. However, the 34 programs which did respond are those most likely to provide immediate assistance to Indian tribes in tailoring vocational programs to the needs of youth and adult students.

Feasibility Connection

For the great majority of jobs ranked by community residents and reported in Chapter III, at least one training program has been developed for American Indians and is listed in the catalog. The catalog descriptions demonstrate that some work has been done towards developing modularized materials. Most of these have been developed by individual teachers or projects and are not widely available. These must be followed up individually to determine their value for each specific instructional setting. Those programs which appeared to have, or stated that they have, substantial portions of their materials which were modularized for students, apart from teacher-developed materials, are listed below along with the areas they address:

- Agricultural (Farm) Training and Livestock Training, Navajo Agricultural Products Industries (stock raising)
- Career Education Demonstration Project for American Indian Children (job awareness skills, job planning skills, school performance skills, job getting and maintaining skills, law, banking, nursing, doctor, teaching, American Indians in the church)
- Cheyenne-Eagle Butte School Vocational Building Trades Program (building construction)
- Cheyenne-Eagle Butte School Cooperative Vocational Education-Distributive Education Program (secretarial work)
- Choices and Careers: Free to Choose: A career Development Project for Tribal Girls (job awareness skills, job planning skills, school performance skills, job getting and maintaining skills)
- Medical Laboratory Technician Program (medical technology)
- Native Artisan Program (small business management)
- Navajo Project Training Component (pipefitting, welding)
- San Juan High School Student Resource Center (silversmithing program)
- Vocational Agriculture (production of sheep byproducts, small business management, farming, stock raising, metal working, welding)
- Vocational Agriculture and Mechanical Agriculture

These materials address 16 of the 44 job categories identified by the Employer Survey and listed in Chapter III. While these program materials may offer a start in developing vocational modules for Native Americans, it is doubtful that many of them could be used without adaptation. In particular, few are likely to address the 34 areas of common skills identified via the Employer Survey (see Chapter IV) without some adaptation, both in terms of content and in terms of the "learning-by-doing" approach favored by most community survey respondents.

Feasibility Statement

The programs identified in the catalog address many vocational areas. Both materials and persons from these programs or from other organizations, may provide assistance in developing vocational modules to help student learning in the 34 common job task areas.

However, it is unlikely that many, or perhaps any, vocational modules exist that address the 34 common job task areas precisely and that are tailored to the desired learning styles of residents of Navajo. The development of appropriate vocational modules will depend on original work (development) in the majority of cases and on substantial adaptation of existing materials in most others.

The fact that this program search identified learning modules for some specific occupations, suggests that the module approach to curriculum in vocational education is both desirable and feasible. But lacking are available modules providing training for common tasks as defined in this feasibility study.

CHAPTER VI

DATA TRENDS, CONCLUSIONS, AND RECOMMENDATIONS

This project was initiated to answer questions basic to planning an effective vocational education program for a small high school in the town of Navajo, New Mexico. As was discussed in Chapter I of this report, the concept of "vocational modules" was proposed in order to provide training for vocational knowledge and performance skills common to a variety of occupations. This research project was designed to answer the question: "Are such vocational modules feasible?" In essence this was a feasibility study that had to address that question within the following conditions. The Community school would have:

1. a small student (youth and adult) population;
2. a fairly wide range of occupations available for placement;
3. the need for both youth and adults to enroll in vocational classes;
4. preparation for jobs in the community, on the Reservation at large, and off the Reservation;
5. community support for vocational education; and
6. vocational programs to meet the labor requirements of employers.

The research staff, working closely with paid and volunteer members of the Navajo Tribe, collected information from these four major sources:

1. relevant research and studies;
2. a community vocational-educational needs assessment with emphasis on vocational education;
3. an employer survey of job openings and employee skill requirements; and;
4. existing successful vocational programs for Indians.

Data from each of these sources were analyzed to produce a "feasibility connection" and a "feasibility statement" bearing directly on the above research question. This chapter summarizes trends across these four data sources and derives conclusions and recommendations from those patterns.

Data Trends

The literature review of previous and current research bearing on this project's feasibility question indicated that 13 of the 17 studies identified vocational education and manpower training as a high priority need for the Navajos. Most of these studies concluded that the economic requirement of a trained labor force demands vocational programs to qualify the large number of unskilled Navajos to effectively compete in the present and future labor market. The expansion of the economy is limited by the available skilled workers. Such statements stress that economic motivation is a support as well as a pressure for vocational education.

Similarly, the Community Survey made it clear that education with a strong emphasis on vocational education in content and methodology (e.g., learning by doing) was of great importance in the minds of the Navajo interviewees. Motivation to participate in vocational training programs is high. More specifically, the participants in this community needs assessment indicated that though their employment rate is high, their concern for jobs and job training is their number one educational priority. In fact, they expressed strong support for: (1) acquiring vocational education; (2) improving in the academic subjects; (3) learning Navajo culture; (4) using a school complex for community functions; and (5) receiving adult education. At least 85% of them reported they desired more education and stated that they would attend a local community school.

From the third data source, the Employer Survey, there is further evidence for this trend in the results. From the perspective of employers contacted in this survey, it appeared that job training prior to employment is a highly significant requirement for job placement and retention. This survey's findings suggest that most Navajo youth and adults need vocational education.

Therefore, the data provide firm documentation of the training need. The critical problem then becomes one of determining how to improve vocational education and job training in the Navajo community. The 13 research studies noted above emphasized that vocational education for Navajos, and other Native Americans, has been weak in content and process. Creative and flexible approaches to improved vocational education were demanded. In this context, some studies suggested that basic training in clusters of vocational knowledge and skills could be a valid and significant concept for the Navajo Reservation.

The Community Survey identified important elements that support the feasibility of providing training in knowledge and skills that are common

to a well-delineated set of occupations. For example, education with a strong emphasis on learning by doing, learning through group experiences, and learning while cooperating with others were of great importance to the interviewees.

In addition, it appears that the vocational curriculum should be structured as a method to enhance the attainment of other educational needs and it should be compatible with Navajo cultural values. Although the percentage of persons needing and wanting vocational education is high, the actual number of persons living there is too limited to support a large number of separate training programs. This is also reflected in the small numbers of respondents who chose each job listed in the survey instrument. Therefore, vocational education must seek an alternative to the "unit shop" concept.

Over one quarter (30%) of all high school age youth interviewed reported that they desired to work rather than to attend school. It is possible that this finding indicates that the present educational curricula and methods available to these youth are inadequate for their needs. If this inadequacy is one of the contributing factors, vocational programs that provide work experiences--and motivation--might be successful in keeping more youth in school.

The Community Survey also revealed that there was a strong desire for adult education in the Navajo community. Adults rated educational achievements as very important. This was reflected in the preferences of adults to attend school and was strongly supported by the "concern about learning" that emerged as a major theme from the critical incidents. These findings suggest that a community school in Navajo would elicit much adult involvement.

A wide variety of job preferences was identified by this survey's results. When each respondent ranked his/her five most desired jobs, 44 jobs had more than one response. The number and variety of these desired jobs precludes specific training in all of them in the type of community school being projected for the town of Navajo. Therefore, the concept of vocational modules on common vocational knowledge and skills is supported, if basic vocational skill training is to be provided for a large per cent of these jobs.

The pattern of jobs identified in both the Community Survey and the Employer Survey and the sparsity of population support the necessity of as much "common" vocational training as possible. The Employer Survey data demonstrated that 34 skill-oriented instructional units could cover 41% of the tasks required for most jobs, especially those tasks required for intial employment. This finding provides strong support for the development and use

of such vocational modules. The employer representatives who responded to this survey instrument indicated that they thought it would be desirable for job candidates to be able to perform the majority of the listed tasks before they entered their jobs. More specifically, they rated nearly all of the job tasks as either "very important" (55%) or "somewhat important" (36%). They also wanted a high quality of performance on those tasks.

Also revealed by data collected through the Employer Survey was the fact that the majority (86%) of the 4,890 full-time employees in the businesses and agencies contacted were Navajos. This finding highlights the importance of culture-specific educational curriculum and methods as were specified in detail by the results of the Community Survey. In addition, since 43% of the full-time employees are women, occupational preparation must include representatives of both sexes. Further, although the job market is relatively good (with 168 current job openings and an average of 400 new openings anticipated for each of the next three years) unemployment among Navajos and a high turnover of employees indicates a strong need for sound vocational training both prior to and during employment. In fact, employee turnover was almost three times as great as was the total of new job openings. Of the 5,145 part-time and full-time employees, a turnover of 22% is expected. That means that jobs will be available to 1,130 persons.

The findings produced by the fourth data source were discouraging. Whereas the results of the other three sources demonstrated the feasibility of an array of vocational modules for job knowledge and skills common to a delimited set of jobs and job tasks, the nationwide search for existing programs successfully providing vocational training to Native Americans identified relatively few transportable products that could be used to present an instructional program at the Navajo community school. It is unlikely that vocational modules exist that address any of the 34 common job task areas precisely and that are tailored to the desired learning styles of residents of Navajo. However, the fact that this program search identified learning modules for some specific occupations, suggests that the module approach to curriculum in vocational education for Native Americans is both desirable and feasible. But lacking are available modules providing training for common tasks as defined in this feasibility study.

Study Conclusions

Perhaps the most dramatic conclusion of this study is the documentation supporting the necessity for a greatly improved system of vocational education for the Navajo Nation. In fact, the current vocational programs are so minimal, that it seems appropriate to be even more emphatic and conclude that a strong vocational education system must be developed for the Navajo Nation to satisfy two of the most fundamental requirements of any economically sound society:

1. a well prepared labor force, and
2. a high level of employment.

Unless these two requirements are met, the economic development will suffer and many Navajos will remain unemployed and thus continue to live on welfare and/or in poverty.

The sparse population over this large Reservation must have a significant impact on the system of vocational education to be developed. This fact coupled with the Navajos' strong desire for local institutions suggests that boarding schools and off-the reservation vocational centers might not be the most viable alternatives. However, the answer to the study's feasibility question, "Are vocational modules feasible?", does seem to provide a strong and useful alternative that will meet the conditions attached to the feasibility question. This study's concluding feasibility statement is as follows:

> Feasibility Statement: This study has clearly shown that vocational modules are feasible and that the development and use of at least 34 specific vocational modules will provide a vocational program of great benefit to both students and employers in the employment area for the Navajo Community High School.

In support of this statement, the six conditions for feasibility as indicated earlier in this chapter and first stated in Chapter I have been met in the manner indicated by the following brief statements.

1. A relatively small number of vocational tasks was identified as a requirement for a basic vocational preparation. This meets the first condition of providing a limited but sound vocational program for a small student body.

2. Since the tasks and required skills to be addressed by the proposed modules are common to a wide range of occupations, the second condition is satisfied.

3. The low priority the community interviewees gave to the mixing of adults and youth in the same class will require special consideration in the structuring of the proposed vocational curriculum. However, this response to the third condition does not diminish the potential benefits of vocational modules as a major component of the proposed vocational education program.

4. Since the vocational modules identified are common to occupations on and off the Reservation, the fourth condition is met.

5. Community support for vocational education was strong; thus the fifth condition is fulfilled.

6. The open-ended responses of the employers to job task requirements identified 34 common tasks that could provide 41% of an important job training program. This finding meets enough of the labor requirements of employers to fulfill the sixth condition.

This study's data substantiate the feasibility of employing an array of vocational modules in the development of the vocational education program for the Navajo Community High School. However, some occupational areas--business and office, manufacturing, and public service--require a full vocational training program designed for technical skills that meet the student and employer needs of the Navajo Community labor market. After more in-depth study, especially as employment conditions change, there may be need for technical training in additional occupational clusters.

A most important question that follows the identification of common tasks is the question of how to teach these tasks. Will there be a separate and unique program to do this? Can these common tasks be taught by using a unit shop technical training program as the vehicle? Will it be a matter of priority in all unit shops to stress the common skills? Can a very popular unit shop, such as automotive, be used as the vehicle for common task learning, even though the need for automotive mechanics is limited? Many other similar questions could be posed. The point here is that a comprehensive investigation is needed to determine how to create a learning environment that will graduate students with

competencies in the common tasks. The remainder of this chapter outlines a systematic strategy for producing such a vocational education program. This strategy could provide a model for developing similar programs for other small communities in and beyond the Navajo Reservation.

Study Recommendations

To produce the desired modularized vocational training program for a community school in the town of Navajo, the planners who have been involved to this point had hoped to employ an adopt-adapt-develop strategy. They had anticipated adopting available training packages wherever possible, adapting or modifying others wherever necessary to insure that they addressed the learning needs and characteristics of Navajo residents, and developing new modules only when gaps were identified. However, this study's fourth data source has revealed that the strategy must be reversed. Module development must now receive the most attention. The transportable training programs identified by this fourth data source and summarized in its catalog address many vocational areas. Both materials and persons from these programs or from other organizations, may provide assistance in developing vocational modules to help student learning in the 34 common job task areas. However, the Navajo developmental effort must be intensive and comprehensive.

The process suggested for the creation of vocational curriculum responsive to the findings of this study is presented under the five major phases listed below. Each of these phases relates to a vocational program using common modules.

- Planning
- Analysis
- Development, Adaption, Adoption
- Implementation
- Evaluation

The phases above are outlined in detail on pages 67-70. Specific tasks are identified and numbered for each of the phases. Figure VI-1 on page 71 uses the task numbers from Table VI-1 and displays them in chart form. There the sequence of task performance is suggested by the placement and alignment of task boxes. The planning, analysis, development, and implementation activities outlined in Phases 1.0 through 4.0 should be scheduled over an 12-month or 18-month period. Most of the monitoring and evaluation tasks in Phases 5.0 would occur

on a continuous basis after that time period, with the basic evaluation planning activities outlined in Tasks 5.1 and 5.2 scheduled during the preceding period.

The performance of these tasks will require a combination of special project staff and regular instructional staff from any school attempting to implement the recommended process. The special project staff should be comprised of persons serving at least the following capacities: (1) a research and development manager who is able to design and supervise the implementation of the overall process; (2) research assistants who can collect, organize, summarize, and use the additional data required for activities like those outlined in Task 2.1 and 2.2; (3) persons who have skills in job and competency analyses, instructional technology, and materials development to perform Tasks 3.1 through 3.9 while working closely with instructional staff who can maintain a planning, reviewing, and editing role in respect to products developed; (4) technicians who are competent in the areas of planning pilot tests, field tests, and program evaluations as well as in producing the instruments and procedures needed for measuring the effects of the modules and program in Phases 3.0 and 5.0; and (5) evaluators who can score, analyze, summarize, and report the results produced in Phases 3.0 and 5.0.

The above list should not suggest that separate persons have to be employed in each category or that individuals have to be employed in those categories on a full-time basis for the entire 12 or 18 months of Phases 1.0 through 4.0. Some persons may have expertise in two or more of those categories. All of the tasks except those assigned to the "Project Manager" could be performed by temporary personnel who have the appropriate levels of training and experience. Regular, full-time instructional staff could assist with most tasks in Phases 1.0 - 3.0 as well as take primary responsibility for all Phase 4.0 tasks.

As for the application of the recommended process in continued planning of the Navajo Community High School, some of the basic tasks in the suggested planning model have been accomplished through the activities of this feasibility study. All four tasks depicted for Phase 1.0 have been completed, at least at a preliminary level. The data and documents available for each of them should be closely inspected as the total planning process continues for that school. These resources should be doublechecked for understandability, accuracy, and utility, then modifications should be made before a concerted effort is made to initiate Phase 2.0 activities. Similarly, preliminary work has been completed on the critically important Phase 2.0 activity summarized by Task 2.2. In order to conduct the difficult competency analyses (to determine the know-

ledges, attitudes, and performance skills students need in order to perform successfully the common job tasks required for Task 3.1), the Task 2.2 information must be complete and accurate. The information available in this study's files should expedite the completion of both of these tasks.

In regard to the topic of module production outlined in Phase 3.0, for the great majority of jobs ranked by community residents and reported in Chapter III of this report, at least one training program has been developed for American Indians and is listed in the catalog, an additional product of this feasibility study. The catalog descriptions demonstrate that some work has been done towards developing modularized materials. Most of these have been developed by individual teachers or projects and are not widely available. These must be followed up individually to determine their value for the Navajo Community High School. Those programs which appeared to have, or stated that they have, substantial portions of their materials which were modularized for students are listed on page 54.

These materials address 16 of the 44 areas listed in Chapter III. While these program materials may offer a start in developing the desired vocational modules, it is doubtful that may of them could be used without adaption. In particular, few are likely to address the 34 areas of common tasks identified through the Employer Survey (see Chapter IV) without some adaptation, both in terms of content and in terms of the "learning-by-doing" approach favored by most community survey respondents.

Finally, in further planning this Community High School, and its programs, there should be a definite attempt to continue to involve community residents through such mechanisms as advisory committees, town meetings, and surveys. Through the planning process the opportunities for "home occupations" and part-time work in business, industry, and government should be carefully examined. The relationships between such desired work patterns and the necessary educational programs must be carefully explored and well designed.

As noted earlier in this chapter, the approaches used throughout this study and, in particular, the instructional design, development, implementation, and evaluation process presented on the following pages should assist other persons, not just those individuals who are planning the Navajo Community High School, who are attempting to build vocational programs for small communities. That process is intended to serve as a model or prototype stated in a generalized

form that expedites its application in a wide variety of educational settings. The Navajo School has provided the initial focus of this model, but its utility for other school applications involving ethnic minorities should be apparent. Any such applications should also carefully validate the data collected in this feasibility study. For example, other educational planners should verify that the common tasks identified by this study's research team are appropriate for employers and similar jobs in the work settings most pertinent to the school programs being considered.

TABLE VI-1

Example Tasks in Proposed Instructional Development and Implementation Process

PHASE 1 - PROGRAM AND MODULE PLANNING

1.1 Assess needs for, and supply of, skilled and unskilled employees (using employment statistics, needs analyses, supply data, literature surveys, employer surveys, etc.)

1.2 Assess characteristics, needs, and interests of prospective candidates for vocational education and training (using literature reviews, direct observations, surveys of the target population, follow-up studies of participants in related training programs, etc.)

1.3 Integrate information from Tasks 1.1 and 1.2 in the form of conclusions and recommendations for a desirable and feasible vocational education and training program and set of instructional modules

1.4 Develop an overall plan or model for the instructional development process, submit it for review, and revise it accordingly

PHASE 2 - PROGRAM AND MODULE ANALYSIS

2.1 Conduct a more thorough assessment and analysis of the characteristics, needs, interests, and entering competencies of the training target population by building on data collected from Task 1.2 and performing individual assessments as necessary

2.2 Formulate job and job-task information by building on data collected from Task 1.1 and preparing job descriptions, detailing and listing the tasks employees must perform in those jobs, and selecting those tasks for which instruction will be provided

2.3 Determine resources that are required to provide the identified instruction (including space, equipment, tools, materials, training staff, environmental conditions, etc.)

2.4 Integrate information from Tasks 2.1 - 2.3 into a more detailed management plan for the instructional development process building on the plan from Task 1.4, submit it for review, and revise it accordingly

2.5 Assign staff responsibilities for the instructional development process

PHASE 3 - PROGRAM AND MODULE DEVELOPMENT, ADAPTATION, AND ADOPTION

3.1 Identify performance skills, knowledges, and attitudes (psychomotor, cognitive, and affective outcomes) necessary to perform the tasks from Task 2.2 including marketable job skills and job attaining and maintaining skills

3.2 Determine measurable outcomes (common and unique ones) training participants should achieve from the total program (i.e., the entire array of instructional modules)

3.3 Determine the general purpose and content, including prerequisite outcomes, for each module

3.4 Develop a content specification (or outline) for each instructional module indicating its prerequisites, instructional goal, specific measurable objectives (including specific performance standards), types of activities that trainees will use in order to achieve those objectives, and resources (e.g., equipment and materials) they will require to complete those activities

3.5 Submit each module outline for expert review by persons who have expertise in this content area as well as in instructional technology. Included here should be an analysis of the scope and sequence of the instructional objectives <u>across</u> all modules in the total program. Revise each outline based on reactions received.

3.6 Identify for each approved module outline those instructional materials which need to be developed, those that can be adapted from currently available resources, and those that can be adopted in their current form

3.7 Produce a first draft of each module using the appropriate development, adaptation, or adoption procedure; selecting the learning methods and activities best suited to each instructional objective; and satisfying the guidelines summarized in a checklist for module development

3.8 Produce a first draft of criterion-referenced exercises and items keyed to each module's objectives and designed to evaluate the effectiveness of that module's activities and resources in helping students achieve those objectives

3.9 Submit for expert review each draft module developed in Task 3.7 and its assessment technique developed in Task 3.8 and revise them accordingly

3.10 Develop a plan and schedule for pilot testing each module and assessment technique with 6-10 students who have learning needs and characteristics similar to those of the intended target group

3.11 Produce sufficient pilot test copies of each module and its assessment

3.12 Conduct each module's pilot test and revise the methods and materials based on the results received

3.13 Develop a plan and schedule for a comprehensive field test of each set of related modules from the total program revised in Task 3.12. Each field test should engage at least 20 students, who are representative of the target population, in working through the set of modules and their respective assessments and collect comparable evaluation data from at least 10 similar control students who are not exposed to the modules.

3.14 Produce sufficient field test copies of each module and its assessment revised in Task 3.12

3.15 Train instructional staff to administer the field test modules and assessments

3.16 Conduct the field tests while collecting data from the participating and the comparison students, then revise the instructional methods and materials accordingly.

3.17 Prepare a summary report of the field test procedures, results, and conclusions

PHASE 4 - PROGRAM AND MODULE IMPLEMENTATION

4.1 Produce a plan and schedule for implementing the field-test-revised instructional methods and materials in the actual school setting with the regular youth and adult students

4.2 Submit the plan and schedule for the review of the school's administration and revise them based on reactions received

4.3 Provide orientation and inservice training to all instructional staff who will implement the field-test validated program

4.4 Purchase or produce and install all equipment required to implement the instructional program

4.5 Modify all instructional facilities in the ways necessary to implement the program

4.6 Produce sufficient implementation copies of each module and assessment technique revised in Task 3.15 based on the field test results and maintain close quality control over all materials produced

4.7 Implement the instructional program according to the plan and schedule approved in Task 4.2

PHASE 5 - PROGRAM AND MODULE EVALUATION

5.1 Produce a plan and schedule for evaluating the instructional program that is implemented in the school setting

5.2 Submit the plan and schedule for the review of the school's administration and revise them based on reactions received

5.3 Develop first drafts of assessment instruments and procedures to be used in the program evaluation including, for example: (a) survey tests involving criterion-referenced exercises and items keyed to selected objectives across groups of related modules (b) student and staff reaction inventories sampling their attitudes to, opinions of, and suggestions for the program; and (c) follow-up questionnaires measuring outcomes experienced by graduates of the program as well as by persons who leave before completing their training

5.4 Submit for expert review each draft evaluation instrument and procedures developed in Task 5.3 and revise them accordingly

5.5 Develop a plan and schedule for pilot testing each evaluation instrument and procedure with 6-10 students or graduates of the program

5.6 Produce sufficient pilot test copies of the evaluation instruments and procedures

5.7 Conduct the pilot tests and revise the instruments and procedures based on the results received

5.8 Produce sufficient copies of the pilot-test revised version of each instrument and procedure produced by Task 5.7

5.9 Select and train staff to implement the evaluation plan approved in Task 5.2

5.10 Conduct the program evaluation according to the approved plan and schedule

5.11 Collate, process, and analyze data collected in the program evaluation

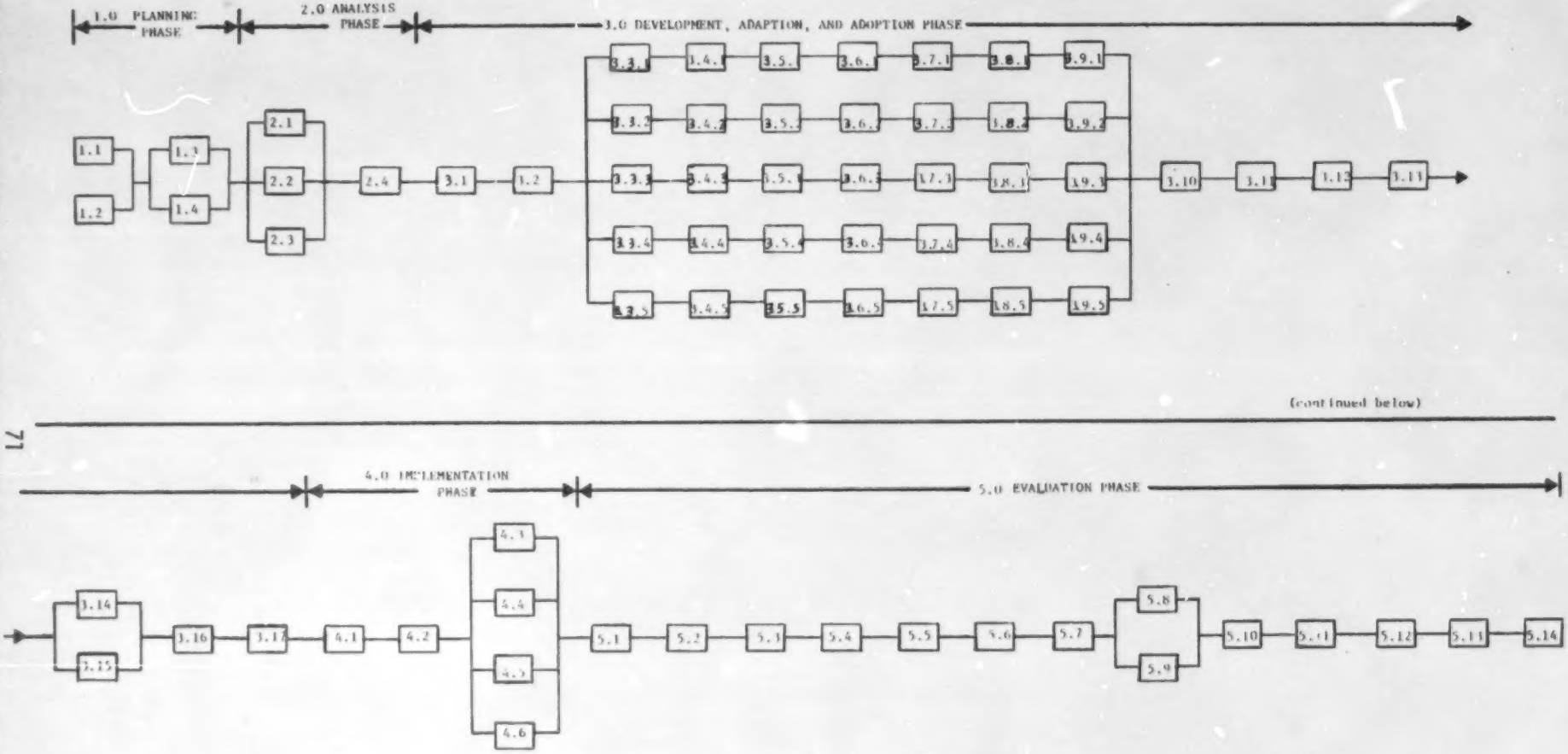
5.12 Summarize and report the results of the program evaluation while making recommendations for continued improvement in the modules, the total program, and the procedures used during the program and after students leave it

5.13 Modify the program and modules based on recommendations produced in Task 5.12

5.14 Maintain an on-going monitoring and evaluation system for assessing the progress of individual students in the program and for insuring that continuous improvements are made in the program and modules

FIGURE VI-1

Flowchart of Example Tasks in Proposed Instructional Development and Implementation Process
(Illustrated for Five Modules)



VOCATIONAL/EDUCATIONAL NEEDS ASSESSMENT

Navajo, New Mexico

FORM I

INTERVIEW QUESTIONNAIRE

A. BACKGROUND INFORMATION ON THE FAMILY UNIT

B. PREFERENCES FOR LEARNING

C. IDENTIFICATION OF CRITICAL INCIDENTS RELATED TO EDUCATIONAL EXPERIENCES

F. PREFERENCES FOR SUPPORTIVE ACADEMIC AND CULTURAL EDUCATION AND FOR COMMUNITY INVOLVEMENT IN THE SCHOOL

Interview date: _____

Beginning time of interview: _____

Ending time of interview: _____

Length of interview: _____ hours _____ minutes

Languages of interview: _____

Interviewer's signature: _____

Developed by the Youth Development Research Group of the American Institutes for Research on a project with the Department of Education, Navajo Nation, Window Rock, Arizona, under support by the United States Office of Education, Department of Health, Education, and Welfare under Part C of the Vocational Education Act of 1963.

January 1977

Questionnaire Number _____

The purpose of this survey is to get information that describes the vocational/educational needs of residents of this community so that the Navajo Community School can offer a program to fulfill those needs.

Checklist of interviewer tasks:

____1. Introduce yourself to the interviewees if necessary. Explain the purpose of the interview and try to establish cooperative feelings.

____2. Explain that responses are confidential and no names will be written on the questionnaire.

____3. Tell interviewees that they don't have to write anything, as you will record their responses on the questionnaire.

____4. Fill in the information requested on the cover page.

____5. Read the instructions and/or the questions to the interviewees and indicate the type of response required. If the interviewee doesn't understand, reread and put statements in different words if necessary. If you have to reword something, please make sure to keep the meaning the same.

____6. Encourage brief but complete answers.

____7. Whenever you come to a spot where people may add their own ideas, say something like, "Do you want to add anything?" If anyone volunteers an idea, write it in a blank. If you think an idea clearly belongs in another spot, write it in the other spot; if you're not sure, write it where the person mentions it.

____8. If the family has more people than the spaces in this instrument, use another questionnaire. If you run out of blanks for a question, add statements under the printed blanks.

____9. If you need separate pages for critical incidents, be sure to fill in the numbers in the corner of each sheet. Turn in all materials for each interview as a set.

___10. Write down the responses. Most questions will have one-word or very short answers, or ratings. Where longer answers are required, please write complete sentences unless you are certain that phrases will clearly communicate the response to later readers of the questionnaire. If you have to reword the interviewee's response, be sure he or she agrees that what you wrote is what was meant.

___11. Write down a response for every question, unless the directions tell you not to. However, if the question is not applicable, write "N/A."

___12. After the interview is over, check all answers again for clearness and completeness. Remember to fill in ending time and length of interview on the cover page.

A. BACKGROUND INFORMATION ON THE FAMILY UNIT

1. Where is your home?
   a. Navajo, New Mexico _____
   b. Crystal, New Mexico _____
   c. Red Lake, Arizona _____
   d. Sawmill, Arizona _____

2. Who lives in this house?

	Tribe or Race	Last Grade in School
a. Mother	_____	_____
b. Father	_____	_____
Other Adults over the age of 19:		
c.	_____	_____
d.	_____	_____

Children:	How Many?	Tribe or Race:
a. Age under 15	_____	_____
b. Age 15 through 19	_____	_____

3. How many of the children ages 15 through 19 go to school? _____

4. What school(s) do they attend?

	School Name	School Location	How Many?
a.	_____	_____	_____
b.	_____	_____	_____
c.	_____	_____	_____

5. How many of the children ages 15 through 19 do not go to school? _____

6. What was the last grade attended for each?
   a. _____
   b. _____
   c. _____
   d. _____

7. How do you each spend your day? *NOTE TO INTERVIEWER: Fill in the oval(s) which represents the right answer(s) for each person.*

	Working or Being at Home	*Attending School*	*Working Full-Time Away from Home*	*Working Part-Time Away from Home*	*Other (Specify)*
a. Mother	0	0	0	0	_____
b. Father	0	0	0	0	_____
Other Adults over the age of 19:					
c.	0	0	0	0	_____
d.	0	0	0	0	_____
Children aged 15-19:					
e.	0	0	0	0	_____
f.	0	0	0	0	_____
g.	0	0	0	0	_____
h.	0	0	0	0	_____

8. If you could do what you wanted, how would you each like to spend your day? *NOTE TO INTERVIEWER: Fill in the oval(s) which represents the right answer(s) for each person.*

	Working or Being at Home	*Attending School*	*Working Full-Time Away from Home*	*Working Part-Time Away from Home*	*Other (Specify)*
a. Mother	0	0	0	0	_____
b. Father	0	0	0	0	_____
Other Adults over the age of 19:					
c.	0	0	0	0	_____
d.	0	0	0	0	_____
Children aged 15-19:					
e.	0	0	0	0	_____
f.	0	0	0	0	_____
g.	0	0	0	0	_____
h.	0	0	0	0	_____

9. What are the jobs, either paid or unpaid, each of you has worked at longest?
NOTE TO INTERVIEWER: No more than two for parents and other adults; no more than one for youths 15-19. Fill in the correct oval for "on reservation" or "off reservation." Try to describe what the person does or did at the job if the job title does not say. If the person is currently working at NFPI, you can just write "NFPI."

		Kind of Job	On Reservation	Off Reservation
Mother	a.	_____	0	0
	b.	_____	0	0
Father	c.	_____	0	0
	d.	_____	0	0
Other Adults over the age of 19:				
Adult 1	e.	_____	0	0
	f.	_____	0	0
Adult 2	g.	_____	0	0
	h.	_____	0	0
Children aged 15-19:				
	i.	_____	0	0
	j.	_____	0	0
	k.	_____	0	0
	l.	_____	0	0

10. What is your home chapter or chapters? Father _____

Mother _____

11. What languages can each person read, write or speak, either well or a little? *NOTE TO INTERVIEWER: If the person reads, writes, or speaks the language somewhat, fill in the oval under the "S." If the person reads, writes, or speaks the language well, fill in the oval under "W."*

EXAMPLE:

	English					
	Read		Write		Speak	
	S	W	S	W	S	W
Father	0	0	●	0	0	●

In this example, the father spoke English very well and could write English somewhat. The oval under "S" was filled in for Write and the oval under "W" was filled in for Speak.

	NAVAJO						ENGLISH						OTHER LANGUAGE(specify): _____					
	Read		Write		Speak		Read		Write		Speak		Read		Write		Speak	
	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W
Mother	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Father	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other adults over the age of 19:																		
1.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Children aged 15-19:																		
1.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

A-4

B. PREFERENCES FOR LEARNING METHODS, MATERIALS, AND CONDITIONS AND TEACHER CHARACTERISTICS

NOTE TO INTERVIEWER: In this portion of the interview you will be reading aloud to the family a number of specific statements about learning methods, materials, and condition, and the characteristics of teachers. Once again, record each person's response. Read the following statement.

"Imagine you are going back to school, or if you currently are in school, listen to the following statements about learning methods, materials, and conditions. For each statement tell me if you think that method, material, or condition would be very helpful for your learning, somewhat helpful for your learning, or not helpful to you. If you think an important way of learning has been left out, tell me and I will add it to the list.

"Parents please respond to each statement twice. First, respond as if you yourself were enrolled in school and were learning by that method, material, or condition. Second, respond in terms of how you believe your children might learn by that method, material or condition."

NOTE TO INTERVIEWER: Answer any questions anyone may have. Then read the statements and write down each person's response. Write down all responses for one statement before going on to the next statement. Circle the letter corresponding to a person's response in the box for that person for that question. The responses are lettered as follows:

A. Very helpful to learning

B. Somewhat helpful to learning

C. Not helpful to learning; in fact, this might prove harmful

When you write down responses for youths or non-parent adults, it doesn't matter who is Adult 1 or 2 or Youth 1, 2, 3, or 4. However, it is important that throughout the rest of the questionnaire you refer to these people by the same number.

EXAMPLE:

	Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother: Self	Mother: Youths	Father: Self	Father: Youths
1. To participate in field trips	A B C	A B C	(A) B C	A (B) C	A B C	A B C	A (B) C	(A) B C	A (B) C	(A) B C

In this example, one youth in the family responded to question 1 by saying that participating in field trips would be very helpful to her. So the interviewer circled A under "Youth 1." A second youth responded that participating in field trips would be somewhat helpful; B is circled under "Youth 2." The mother said field trips would be helpful to her, but very helpful for Navajo children, so B is circled under "Mother: Self" and A is circled under "Mother: Youths." The father made the same responses and is marked in the same way as the mother.

1. LEARNING METHODS	Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother: Self	Mother: Youths	Father: Self	Father: Youths
1.1 Participating in field trips	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.2 Participating in group discussions or projects	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.3 Discussing your progress individually with another person your age or a staff member	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.4 Studying first, then practicing doing what you studied	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.5 Doing first, then studying about what you have been doing	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.6 Going to school with other students of all ages, both youth and adult	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.7 Having on-the-job training	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.8 Attending lectures	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.9 Using teaching machines	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.10 Talking with people who know about schools, jobs, and the Navajo Community	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.11 Observing others and practicing doing what they do.	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.12 _____ _____	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
1.13 _____ _____	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C

2. LEARNING MATERIALS	Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother: Self	Mother: Youths	Father: Self	Father: Youths
2.1 Using textbooks	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
2.2 Seeing films or slides	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
2.3 Using audiotapes or videotapes which play back to you what you do	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
2.4 Seeing television programs	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
2.5 Using programmed materials	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
2.6 Listening to radio and recordings	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
2.7 Using tools	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
2.8 Using art or craft supplies and materials	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
2.9 Using library materials	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
2.10 _____ _____ _____	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C

3. LEARNING CONDITIONS	Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother: Self	Mother: Youths	Father: Self	Father: Youths
3.1 To be able to learn in English	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
3.2 To be able to learn in Navajo	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
3.3 To be able to cooperate with other students in learning activities	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
3.4 To be able to progress at your own rate	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
3.5 To be able to compete with other students in learning activities	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
3.6 To be evaluated by taking tests	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
3.7 To be evaluated by other means than tests	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
3.8 To have the school in the town of Navajo	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
3.9 _____ _____	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
3.10 _____ _____	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C

4. TEACHER CHARACTERISTICS

NOTE TO INTERVIEWER: This question asks each person to choose the three most important characteristics of a good teacher. You are to read the choices aloud to the family, ask if they want to add any others, and write those down if anyone has any. Then, ask each person to choose what he or she thinks is the most important characteristic, and write "1" across from that characteristic in the appropriate column for that person. Ask each interviewee to choose a second most important characteristic and write "2" where it belongs. Then ask for his or her third choice and write "3." Try to get each person to answer what he or she thinks, instead of a group answer. Read the following to the family group.

"Now I'd like to find out what each of you thinks are the three most important characteristics of a good teacher. I'll read some characteristics and you can add any you think are left out. Then I'll read the whole list and I'd like each person to name what he or she personally thinks is most important. Then tell me what you personally think is second most important, and then third most important."

	Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother: Self	Mother: Children	Father: Self	Father: Children
4.1 Teachers who know their subjects and explain them clearly.										
4.2 Teachers who relate well to young people.										
4.3 Teachers who are Navajo.										
4.4 Teachers who are not Navajo.										
4.5 Teachers who know Indian cultures.										
4.6 Teachers who maintain strict discipline.										
4.7 _____										
4.8 _____										
4.9 _____										
4.10 _____										

B-5

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C. IDENTIFICATION OF CRITICAL INCIDENTS RELATED TO EDUCATIONAL EXPERIENCES

NOTE TO INTERVIEWER: A critical incident is an event from the interviewee's experience which he or she feels was important, and an explanation of why it was important. For example, a critical incident concerning good education might be, "I remember a teacher's aide who really helped me because she spoke both English and Navajo very well and helped me understand what I read."

Ask for the following critical incidents from each family member 15 or older. Read the following to the family group:

"Now I'd like to have each of you think about a time in school when you feel you learned something very well for some reason: maybe the teacher was good, the materials were good, the way of learning suited you. I would like to write down any incidents that are important to each of you. Let's go one person at a time."

NOTE TO INTERVIEWER: At this point, designate the order people should speak in, or else record incidents as people volunteer. Be sure to circle who is speaking: Mother, Adult 1, Youth 2, etc. Read the following questions to each interviewee in turn and record his or her answers. If you reword answers, be sure the interviewee agrees that what you wrote is what was meant. Use complete sentences unless you are sure that pharses will clearly communicate the answers.

1. Incidents of Effective Learning

Person speaking: (Adult 1) (Adult 2) (Mother) (Father)

(Circle one) (Youth 1) (Youth 2) (Youth 3) (Youth 4)

a. Describe the situation.

(1) Who or what was involved?

(2) Exactly what happened? What did you do, and/or what did others do?

(3) If learning conditions or materials were involved, what made them helpful?

b. Why do you think you learned so well in this situation?

c. What effects did this incident have on you?

d. In what school did this occur?

e. When did this occur?

Questionnaire number _____

_____ of _____ additional sheets attached

CRITICAL INCIDENTS RELATED TO EDUCATIONAL EXPERIENCES

Incidents of Effective Learning

Person speaking: (Adult 1) (Adult 2) (Mother) (Father)

(Circle one) (Youth 1) (Youth 2) (Youth 3) (Youth 4)

a. Describe the situation.
(1) Who or what was involved?

(2) Exactly what happened? What did you do, and/or what did others do?

(3) If learning conditions or materials were involved, what made them helpful?

b. Why do you think you learned so well in this situation?

c. What effects did this incident have on you?

d. In what school did this occur?

e. When did this occur?

NOTE TO INTERVIEWER: When all incidents of effective learning are recorded, read the following statement to the family group.

"Now I'd like you to think of a time in school when you did not learn well for some reason. As before, I'll record answers from one person at a time."

2. Incidents of Ineffective Learning

Person speaking:	(Adult 1)	(Adult 2)	(Mother)	(Father)
(Circle one)	(Youth 1)	(Youth 2)	(Youth 3)	(Youth 4)

a. Describe the situation.

(1) Who or what was involved?

(2) Exactly what happened? What did you do, and/or what did others do?

(3) If learning conditions or materials were involved, what made them harmful?

b. Why do you think you did not learn well in this situation?

c. What effects did this incident have on you?

d. What changes in that situation would have helped you to learn better?

e. In what school did this occur?

f. When did this occur?

CRITICAL INCIDENTS RELATED TO EDUCATIONAL EXPERIENCES

Incidents of Ineffective Learning

Person speaking: (Adult 1) (Adult 2) (Mother) (Father)
(Circle one) (Youth 1) (Youth 2) (Youth 3) (Youth 4)

a. Describe the situation.
(1) Who or what was involved?

(2) Exactly what happened? What did you do, and/or what did others do?

(3) If learning conditions or materials were involved, what made them harmful?

b. Why do you think you did not learn well in this situation?

c. What effects did this incident have on you?

d. What changes in that situation would have helped you to learn better?

e. In what school did this occur?

f. When did this occur?

F. PREFERENCES FOR SUPPORTIVE ACADEMIC AND CULTURAL EDUCATION AND FOR COMMUNITY INVOLVEMENT IN THE SCHOOL

NOTE TO INTERVIEWER: Read the following statement to the family group.

"In this final section there are several general questions about what you'd like the Navajo Community School to be like. I'll read each question and a list of answers. You can add other answers if you want. I'd like you to tell me which answers you think are important. Anybody can answer; these are questions for the whole group. Try to arrive at a group response to each question."

1. Do you feel the Navajo culture should be formally taught at the community school? *(Check one)* _____ Yes _____ No

   If so, what aspects do you think are important? *(Check all that apply)*

   _____ Art _____ Literature _____ Music _____ History

   _____ Religion _____ Traditions _____ Dance _____ Crafts

   _____ Other (specify) _____

   _____ Other (specify) _____

2. Which of the following subjects are necessary for the community school? *(Check all that apply)*

   _____ Navajo language _____ English language _____ Basic math

   _____ Algebra _____ Geometry _____ General science _____ Biology

   _____ Chemistry _____ Physics _____ Art _____ Music _____ Physical Education

   _____ Navajo literature (transcribed or oral) _____ English literature

   _____ Other (specify) _____

   _____ Other (specify) _____

3. What other functions might the school serve? *(Check all that apply)*

   _____ Community center for meetings, etc.

   _____ Marketplace for student crafts

   _____ Health center

   _____ Library

   _____ Restaurant

   _____ Typing and Bookkeeping Service Center

   _____ Job placement center

   _____ Child care center

   _____ Other (specify) _____

   _____ Other (specify) _____

NOTE TO INTERVIEWER: These next two questions are for the parents and other adults.

4. Do you need or want more education?

	YES	NO
Mother	___	___
Father	___	___
Adult 1	___	___
Adult 2	___	___

5. Would you go to the Navajo Community School?

	YES	NO
Mother	___	___
Father	___	___
Adult 1	___	___
Adult 2	___	___

NOTE TO INTERVIEWER: This question is to be answered by each person.

6. Would you go off the reservation to take a job for which you are trained?

	YES	NO	NOT SURE
Mother	___	___	___
Father	___	___	___
Adult 1	___	___	___
Adult 2	___	___	___
Youth 1	___	___	___
Youth 2	___	___	___
Youth 3	___	___	___
Youth 4	___	___	___

VOCATIONAL/EDUCATIONAL NEEDS ASSESSMENT

Navajo, New Mexico

FORM II

INTERVIEW QUESTIONNAIRE

A. BACKGROUND INFORMATION ON THE FAMILY UNIT

D. SELECTION OF LEARNING OUTCOMES AND JOB PREFERENCES

E. IDENTIFICATION OF CRITICAL INCIDENTS RELATED TO JOB SUCCESS

F. PREFERENCES FOR SUPPORTIVE ACADEMIC AND CULTURAL EDUCATION AND FOR COMMUNITY INVOLVEMENT IN THE SCHOOL

Interview date: _____

Beginning time of interview: _____

Ending time of interview: _____

Length of interview: _____ hours _____ minutes

Languages of interview: _____

Interviewer's signature: _____

Developed by the Youth Development Research Group of the American Institutes for Research on a project with the Department of Education, Navajo Nation, Window Rock, Arizona, under support by the United States Office of Education, Department of Health, Education, and Welfare under Part C of the Vocational Education Act of 1963.

January 1977

Questionnaire Number _____

The purpose of this survey is to get information that describes the vocational/educational needs of residents of this community so that the Navajo Community School can offer a program to fulfill those needs.

Checklist of interviewer tasks:

____1. Introduce yourself to the interviewees if necessary. Explain the purpose of the interview and try to establish cooperative feelings.

____2. Explain that responses are confidential and no names will be written on the questionnaire.

____3. Tell interviewees that they don't have to write anything, as you will record their responses on the questionnaire.

____4. Fill in the information requested on the cover page.

____5. Read the instructions and/or the questions to the interviewees and indicate the type of response required. If the interviewee doesn't understand, reread and put statements in different words if necessary. If you have to reword something, please make sure to keep the meaning the same.

____6. Encourage brief but complete answers.

____7. Whenever you come to a spot where people may add their own ideas, say something like, "Do you want to add anything?" If anyone volunteers an idea, write it in a blank. If you think an idea clearly belongs in another spot, write it in the other spot; if you're not sure, write it where the person mentions it.

____8. If the family has more people than the spaces in this instrument, use another questionnaire. If you run out of blanks for a question, add statements under the printed blanks.

____9. If you need separate pages for critical incidents, be sure to fill in the numbers in the corner of each sheet. Turn in all materials for each interview as a set.

___10. Write down the responses. Most questions will have one-word or very short answers, or ratings. Where longer answers are required, please write complete sentences unless you are certain that phrases will clearly communicate the response to later readers of the questionnaire. If you have to reword the interviewee's response, be sure he or she agrees that what you wrote is what was meant.

___11. Write down a response for every question, unless the directions tell you not to. However, if the question is not applicable, write "N/A."

___12. After the interview is over, check all answers again for clearness and completeness. Remember to fill in ending time and length of interview on the cover page.

A. BACKGROUND INFORMATION ON THE FAMILY UNIT

1. Where is your home?
   a. Navajo, New Mexico ___
   b. Crystal, New Mexico ___
   c. Red Lake, Arizona ___
   d. Sawmill, Arizona ___

2. Who lives in this house?

	Tribe or Race	Last Grade in School
a. Mother		
b. Father		
Other Adults over the age of 19:		
c.		
d.		

Children:	How Many?	Tribe or Race:
a. Age under 15		
b. Age 15 through 19		

3. How many of the children ages 15 through 19 go to school? _____

4. What school(s) do they attend?

	School Name	School Location	How Many?
a.			
b.			
c.			

5. How many of the children ages 15 through 19 do not go to school? _____

6. What was the last grade attended for each?
   a. _____
   b. _____
   c. _____
   d. _____

7. How do you each spend your day? *NOTE TO INTERVIEWER: Fill in the oval(s) which represents the right answer(s) for each person.*

	Working or Being at Home	*Attending School*	*Working Full-Time Away from Home*	*Working Part-Time Away from Home*	*Other (Specify)*
a. Mother	0	0	0	0	_____
b. Father	0	0	0	0	_____
Other Adults over the age of 19:					
c.	0	0	0	0	_____
d.	0	0	0	0	_____
Children aged 15-19:					
e.	0	0	0	0	_____
f.	0	0	0	0	_____
g.	0	0	0	0	_____
h.	0	0	0	0	_____

8. If you could do what you wanted, how would you each <u>like</u> to spend your day? *<u>NOTE TO INTERVIEWER</u>: Fill in the oval(s) which represents the right answer(s) for each person.*

	Working or Being at Home	*Attending School*	*Working Full-Time Away from Home*	*Working Part-Time Away from Home*	*Other (Specify)*
a. Mother	0	0	0	0	_____
b. Father	0	0	0	0	_____
Other Adults over the age of 19:					
c.	0	0	0	0	_____
d.	0	0	0	0	_____
Children aged 15-19:					
e.	0	0	0	0	_____
f.	0	0	0	0	_____
g.	0	0	0	0	_____
h.	0	0	0	0	_____

9. What are the jobs, either paid or unpaid, each of you has worked at longest?
NOTE TO INTERVIEWER: No more than two for parents and other adults; no more than one for youths 15-19. Fill in the correct oval for "on reservation" or "off reservation." Try to describe what the person does or did at the job if the job title does not say. If the person is currently working at NFPI, you can just write "NFPI."

		Kind of Job	On Reservation	Off Reservation
Mother	a.	_____	0	0
	b.	_____	0	0
Father	c.	_____	0	0
	d.	_____	0	0
Other Adults over the age of 19:				
Adult 1	e.	_____	0	0
	f.	_____	0	0
Adult 2	g.	_____	0	0
	h.	_____	0	0
Children aged 15-19:				
	i.	_____	0	0
	j.	_____	0	0
	k.	_____	0	0
	l.	_____	0	0

10. What is your home chapter or chapters? Father _____

Mother _____

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11. What languages can each person read, write or speak, either well or a little? *NOTE TO INTERVIEWER: If the person reads, writes, or speaks the language somewhat, fill in the oval under the "S." If the person reads, writes, or speaks the language well, fill in the oval under "W."*

EXAMPLE:

	English					
	Read		Write		Speak	
	S	W	S	W	S	W
Father	0	0	●	0	0	●

In this example, the father spoke English very well and could write English somewhat. The oval under "S" was filled in for Write and the oval under "W" was filled in for Speak.

	NAVAJO						ENGLISH						OTHER LANGUAGE(specify): _____					
	Read		Write		Speak		Read		Write		Speak		Read		Write		Speak	
	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W
Mother	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Father	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other adults over the age of 19:																		
1.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Children aged 15-19:																		
1.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D. SELECTION OF LEARNING OUTCOMES AND JOB PREFERENCES

NOTE TO INTERVIEWER: In this part of the interview, the card-sort technique will be used to identify what each interviewee thinks Navajo students need to know and be able to do. The four areas of needs are:

- *o Job awareness needs*
- *o Job planning needs*
- *o School performance needs*
- *o Job getting and maintaining needs*

A fifth card-sort will ask for preferences for different jobs.

You will need the following materials:

1. *Recording forms beginning on page D-3.*
2. *Decks of cards*
3. *Additional blank cards for each of these decks*
4. *Pen or pencil*

Each card in the first four decks contains a statement describing a vocational/educational need. At the back of each deck are two blank cards on which the interviewee may write additional needs she or he feels are important. From the resulting set of needs described for each deck the interviewee is (1) to note which needs she or he feels are unimportant, and (2) to pick the five most important needs in order from 1 to 5 (1 being most important). These tasks need to be repeated by each person for each of the four decks. For this portion of the needs assessment, parents are to respond only for their own needs, not for those of Navajo youth.

Your tasks are:

1. *to distribute the four decks of cards to those who can read well;*
2. *to read the needs aloud to those who do not read well;*
3. *to write down each person's answers; and*
4. *to be sure decks are reassembled and returned.*

Read the following statement to those who read well.

"Now I am going to ask you to look at several sets of needs. The purpose is to find out what needs you think are most important.

"I am going to give each of you four decks of cards. Each deck concerns a different type of vocational/educational need.

"Go through the first deck, 'Job awareness needs.' If you think important needs of that type have been left out, write them on the blank cards. If you need help, if you need more cards, or if you're not sure if the need you want to add belongs in this deck or another, ask me.

"When you have finished adding needs, go through the deck again and decide if you think any needs are not important. Put these in a pile. Then go through the remaining needs once more and pick the five most important. Put these in order with the first being the most important. If you have any questions, ask me.

"When you are through, call me so I can record your selections. Then do the same thing with decks 2, 3, and 4."

NOTE TO INTERVIEWER: Answer any questions they may have and then pass out the four decks.

Record each person's selections in the box for that need for that person. Circle N if the person put the card on the "not important" pile. Circle 1 if the person put that need on top of the deck of "important" cards, 2 for the second most important, and so on. If the person chose in the top five a need he or she added to the deck, write in the need in the blank spaces at the bottom and circle the correct number. Note that some needs will have nothing circled.

EXAMPLE:

I need to learn about:	Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother	Father
1. Many different jobs	(1) 2 3 4 5 N	1 2 3 4 5 N	1 (2) 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 (N)

In this example, Adult 1 placed "many different jobs" on top of the "important" pile, so 1 is circled for him. Youth 1 placed this need second in her pile, so 2 is circled for her. The father placed this need in his "not important" pile, so N is circled for him. The mother thought this need was important, but did not place it in her top five, so nothing is circled for her. Note: "Adult 1," "Youth 1," etc. should be the same persons as they have been throughout the interview.

NOTE TO INTERVIEWER: When you have finished recording responses for all four decks, hand out copies of the deck on job preferences. Read the following to the family group:

"Now I'd like each of you to pick the five jobs you'd most like to hold and rank them in order from one to five. If you wish to add a job that's not on a card, do that first and then choose your top five. When you've finished, call me so I can record your choices."

NOTE TO INTERVIEWER: Mark each person's choices on page D-8 through D-9 in the same format as before, circling 1 for first and so on. Write in any jobs added in one of the blanks and circle the correct number.

When everyone is completely finished, have each person remove and destroy cards containing any added needs and replace these cards with blank ones. Ask them to shuffle each deck and replace the title card on it, band all five decks together, and return them to you. Read the following to those who do not read well:

"I am going to read some statements to you about different types of vocational/education needs. For each need, please tell me if you think that thing is very important, somewhat important, or not important for you.

1. JOB AWARENESS NEEDS

I need to learn about:

		Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother	Father
1.1	many different jobs	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.2	what it's like to work	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.3	what jobs I could do well	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.4	what it's like to work off the reservation	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.5	how college relates to jobs	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.6	what it's like to work with people	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.7	jobs I would like to do	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.8	how much jobs pay	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.9	things I can get from jobs other than money	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.10	how to deal with unemployment	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.11	_____ _____ _____	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
1.12	_____ _____ _____	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N

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2. JOB PLANNING NEEDS

I need to:

	Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother	Father
2.1 decide what job I want to seek	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
2.2 learn what jobs are available to me	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
2.3 plan a program of courses to help me get into the school or get the job I want	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
2.4 explore one job very carefully	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
2.5 talk to someone at school to help me plan my school and work future	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
2.6 find out what people or agencies can help me find work	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
2.7 find out where I can get vocational training for the job I want	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
2.8 find out where I can get money to help me go to school	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
2.9 plan several options in case one job doesn't work out	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
2.10 _____	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
2.11 _____	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N

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3. SCHOOL PERFORMANCE NEEDS

I need to:	Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother	Father
3.1 improve my ability to read, write, or speak English	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.2 improve my ability to read, write, or speak Navajo	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.3 study better	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.4 stay rested and healthy	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.5 get more personal help from my teachers	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.6 learn basic skills in math	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.7 learn basic skills in science	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.8 learn how to take tests better	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.9 deal with bad feelings about school and boredome in school	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.10 get specific training for the job I want	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.11 complete assignments on time and follow a study schedule	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.12 become more comfortable when speaking in class	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.13 find a place where I can study better	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N

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3. SCHOOL PERFORMANCE NEEDS (Continued)

I need to:

	Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother	Father
3.14 know what the teacher expects one to learn and to do	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.15 hear and remember better what the teacher says in class	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.16 _____	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
3.17 _____	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N

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4. JOB GETTING AND MAINTAINING NEEDS

I need to:

		Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother	Father
4.1	learn where to look for job openings	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
4.2	learn how to fill out job application forms	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
4.3	learn how to act during job interviews	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
4.4	get to work regularly and on time	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
4.5	get along well with co-workers and supervisors	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
4.6	be able to influence the way and the place that I work	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
4.7	understand the impact of my attitudes toward work	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
4.8	learn what is expected of me on a job and why	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
4.9	learn how my job fits into the work of the company as a whole	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
4.10	_____	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N
4.11	_____	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N	1 2 3 4 5 N

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5. JOB PREFERENCES

I would like to have a job in the following field:

	Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother	Father
5.1 Road construction	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.2 Law	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.3 Production of sheep by-products	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.4 Homemaker	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.5 Banking	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.6 Hotel management	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.7 Electronics	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.8 Small business management	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.9 Selling	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.10 Radio and TV repairs	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.11 Auto repairs and mechanics	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.12 Laundry cleaning	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.13 Janitorial services	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.14 Accounting	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.15 Architecture	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.16 Building construction	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.17 Food processing	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.18 Farming	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.19 Forestry work	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.20 Stock raising	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

5. JOB PREFERENCES (con't.)

I would like to have a job in the following field:

		Adult 1	Adult 2	Youth 1	Youth 2	Youth 3	Youth 4	Mother	Father
5.21	Restaurant staffing	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.22	Cashiering	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.23	Leathercraft	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.24	Baking	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.25	Silversmithing	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.26	Metal working	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.27	Welding	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.28	Weaving	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.29	Pottery making	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.30	Medical assisting	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.31	Nursing	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.32	Doctor	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.33	Teaching	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.34	Teacher assisting	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.35	Dental assisting	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.36	Cosmetology (beautician work)	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.37	Sawmill work	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.38	Bookkeeping	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.39	Secretarial work	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
5.40	_____	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

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E. IDENTIFICATION OF CRITICAL INCIDENTS RELATED TO JOB SUCCESS

NOTE TO INTERVIEWER: A critical incident is an event from the interviewee's experience which he or she feels was important, and an explanation of why it was important. For example, a critical incident concerning good education might be, "I remember a teacher's aide who really helped me because she spoke both English and Navajo very well and helped me understand what I read."

Ask for the following critical incidents from each family member 15 or older. Read the following to the family group.

"I would like each of you who has worked at a job outside the home to think of a time when you were working and you performed on the job successfully for some reason: your supervisor was good at explaining things, you were especially careful in checking quality of what you did, the working conditions were good, etc., and both you and your employer were satisfied. As before, I'd like to write down any incidents that are important to each of you. Let's go one person at a time."

NOTE TO INTERVIEWER: Read the following questions to each interviewee in turn and record his or her answers. If you reword answers, be sure the interviewee agrees that what you wrote is what was meant. Use complete sentences unless you are sure that phrases will clearly communicate the answers.

1. Incidents of Effective Job Performance

Person speaking: (Adult 1) (Adult 2) (Mother) (Father)

(Circle one) (Youth 1) (Youth 2) (Youth 3) (Youth 4)

a. What was the job?

b. Describe the situation.

(1) Who or what was involved?

(2) Exactly what happened? What did you do, and/or what did others do?

(3) If working conditions or materials were involved, what made them helpful?

c. Why do you think you were successful on this job?

d. What things had you learned that you think helped you?

e. Where or how did you learn those things?

f. When did this occur?

Questionnaire number _____

_____ of _____ additional sheets attached

CRITICAL INCIDENTS RELATED TO JOB PERFORMANCE

Incidents of Effective Job Performance

Person speaking: (Adult 1) (Adult 2) (Mother) (Father)

(Circle one) (Youth 1) (Youth 2) (Youth 3) (Youther 4)

a. What was the job?

b. Describe the situation.
(1) Who or what was involved?

(2) Exactly what happened? What did you do, and/or what did others do?

(3) If working conditions or materials were involved, what made them helpful?

c. Why do you think you were successful on this job?

d. What things had you learned that you think helped you?

e. Where or how did you learn those things?

f. When did this occur?

NOTE TO INTERVIEWER: When all incidents of effective performance are recorded, read the following statement to the family group.

"Now I'd like each of you to think of a time when you were working and you performed on the job unsuccessfully for some reason."

2. Incidents of Ineffective Job Performance

Person speaking: (Adult 1) (Adult 2) (Mother) (Father)

(Circle one) (Youth 1) (Youth 2) (Youth 3) (Youth 4)

a. What was the job?

b. Describe the situation.

(1) Who or what was involved?

(2) Exactly what happened? What did you do, and/or what did others do?

(3) If working conditions or materials were involved, what made them harmful?

c. Why do you think you were not successful on this job?

d. What things could you have learned that might have helped you?

e. Where or how do you think you could have learned them?

f. When did this occur?

CRITICAL INCIDENTS RELATED TO JOB PERFORMANCE

Incidents of Ineffective Job Performance

Person speaking: (Adult 1) (Adult 2) (Mother) (Father)
(circle one) (Youth 1) (Youth 2) (Youth 3) (Youth 4)

a. What was the job?

b. Describe the situation.
(1) Who or what was involved?

(2) Exactly what happened? What did you do, and/or what did others do?

(3) If working conditions or materials were involved, what made them harmful?

c. Why do you think you were not successful on this job?

d. What things could you have learned that might have helped you?

e. Where or how do you think you could have learned them?

f. When did this occur?

F. PREFERENCES FOR SUPPORTIVE ACADEMIC AND CULTURAL EDUCATION AND FOR COMMUNITY INVOLVEMENT IN THE SCHOOL

NOTE TO INTERVIEWER: Read the following statement to the family group.

"In this final section there are several general questions about what you'd like the Navajo Community School to be like. I'll read each question and a list of answers. You can add other answers if you want. I'd like you to tell me which answers you think are important. Anybody can answer; these are questions for the whole group. Try to arrive at a group response to each question."

1. Do you feel the Navajo culture should be formally taught at the community school? *(Check one)* _____ Yes _____ No

   If so, what aspects do you think are important? *(Check all that apply)*

   _____ Art _____ Literature _____ Music _____ History

   _____ Religion _____ Traditions _____ Dance _____ Crafts

   _____ Other (specify) _____

   _____ Other (specify) _____

2. Which of the following subjects are necessary for the community school? *(Check all that apply)*

   _____ Navajo language _____ English language _____ Basic math

   _____ Algebra _____ Geometry _____ General science _____ Biology

   _____ Chemistry _____ Physics _____ Art _____ Music _____ Physical Educatio

   _____ Navajo literature (transcribed or oral) _____ English literature

   _____ Other (specify) _____

   _____ Other (specify) _____

3. What other functions might the school serve? *(Check all that apply)*

   _____ Community center for meetings, etc.

   _____ Marketplace for student crafts

   _____ Health center

   _____ Library

   _____ Restaurant

   _____ Typing and Bookkeeping Service Center

   _____ Job placement center

   _____ Child care center

   _____ Other (specify) _____

   _____ Other (specify) _____

NOTE TO INTERVIEWER: These next two questions are for the parents and other adults.

4. Do you need or want more education?

	YES	NO
Mother	___	___
Father	___	___
Adult 1	___	___
Adult 2	___	___

5. Would you go to the Navajo Community School?

	YES	NO
Mother	___	___
Father	___	___
Adult 1	___	___
Adult 2	___	___

NOTE TO INTERVIEWER: This question is to be answered by each person.

6. Would you go off the reservation to take a job for which you are trained?

	YES	NO	NOT SURE
Mother	___	___	___
Father	___	___	___
Adult 1	___	___	___
Adult 2	___	___	___
Youth 1	___	___	___
Youth 2	___	___	___
Youth 3	___	___	___
Youth 4	___	___	___

APPENDIX C

CRITICAL INCIDENT CLASSIFICATION SUMMARY

Incidents of Effective Learning Methods, Materials, or Conditions/Teacher Characteristics

Incidents were classified into three main types:

Methods of Learning. Six incidents fell within this category. The main emphasis was on learning by active student involvement, either by participation in class activities or discussions or by engaging in hands-on experience. Some examples are:

1. Person speaking: Father (Navajo)
   a. Describe the situation. (1) Who or what was involved?
   "Group discussion. Two persons held hands and relate problems."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "The person (holds) hands and relates problems. The others in the group did likewise. This experience help me overcome fears."
   (3) If learning conditions were involved, what made them helpful?
   "Need to know another person before you can really trust him."
   b. Why do you think you learned so well in this situation?
   "Because everybody felt the same way. Had fears before the experience."
   c. What effects did this incident have on you?
   "I always take the initiative to talk to others."
   d. In what school did this occur?
   "Crown Point on-site education."
   e. When did this occur?
   "Eight years ago."
2. Person speaking: Mother (Navajo)
   a. Describe the situation. (1) Who or what was involved?
   "Teacher was real good."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "In Biology class. Bring animals, learned their behavior and way they acted."
   (3) If learning conditions or materials were involved, what made them helpful?
   "She explained everything clearly. The teacher could do it first, and we follow direction after her."
   b. Why do you think you learned so well in this situation?
   "Because I had the highest grade in Biology."
   c. What effects did this incident have on you?
   "The teacher encouraged me. I was a good student and doing well."
   d. In what school did this occur?
   "Sherman Institute, Riverside, California."
   e. When did this occur?
   "High school, sophomore year. Thirteen years ago."
3. Person speaking: Mother (Anglo)
   a. Describe the situation. (1) Who or what was involved?
   "A Teacher who made history interesting. Also taught English lit."
   (2) Exactly what happened? What did you do, and/or what did others do?

"In English Lit and history we read aloud--discussed what we studied and competed in class. All students were involved."
(3) If learning conditions or materials were involved, what made them helpful?
"The teacher's enthusiasm and student involvement. We read Shakespeare aloud and each student participated."
b. Why do you think you learned so well in this situation?
"Because we didn't just read something and take a test. There was lively discussion and class involvement.
c. What effects did this incident have on you?
"I learned a lot then and I still remember it almost 20 years later."
d. In what school did this occur?
"East Jr. High, Boise [illegible]."
e. When did this occ[illegible]
"1957."

Staff Involved in Learning. Seventeen incidents fell within this category. All 17 concerned teacher behavior, with one also mentioning dormitory staff. Five aspects of teacher behavior were noted as important: (1) strictness in 6 incidents; (2) individual attention in 1 incident (also implied in several others); (3) encouragement in 2 incidents; (4) clearness in explaining subject in 2 incidents; (5) enthusiasm for and interesting presentation of subject matter in 2 incidents; and (6) good relationships with students (including interest in students, patience, openness to questions, and understanding of young people) in 4 incidents. Some examples are:

1. Person speaking: Mother (Navajo)
a. Describe the situation. (1) Who or what was involved?
"Teacher and booklet."
(2) Exactly what happened? What did you do, and/or what did others do?
"Teachers at that time were strict. Lesson, homework and subjects were a must to have it completed."
(3) If learning conditions or materials were involved, what made them helpful?
"Class participation was perfect--this made the difference this was good for all of us in English and math."
b. Why do you think you learned so well in this situation?
"I have the experience and using it now."
c. What effects did this incident have on you?
(No response recorded.)
d. In what school did this occur?
"Albuquerque Indian School
e. When did this occur?
"Eighth grade."
2. Person speaking: Mother (Navajo)
a. Describe the situation. (1) Who or what was involved?
"English class and teacher."
(2) Exactly what happened? What did you do, and/or what did others do?
"Teacher knows more about Indian and teaches English and literature very carefully and explains very good.
(3) If learning materials were involved, what made them helpful?
"Textbooks."
b. Why do you think you learned so well in this situation?
"Because now I'm a teacher's aide for English. The teacher liked Indians."
c. What effects did this incident have on you?
(No response recorded.)

d. In what school did this occur?
"Wingate High School."
e. When did this occur?
"1968-69."

3. Person speaking: Father (Anglo)
a. Describe the situation. (1) Who or what was involved?
"College instructor and myself."
(2) Exactly what happened? What did you do, and/or what did others do?
"Instructor presented a subject that I was very interested in and was very enthusiastic about his presentation becuase he was very interested in the subject.
(3) If learning conditions or materials were involved, what made them helpful?
"Outside lecturers with more first hand information."
b. Why do you think you learned so well in this situation?
"Because the instructor was so excited about what he was teaching."
c. What effects did this incident have on you?
"I have continued to pursue this subject area and I continue to enjoy it."
d. In what school did this occur?
"Northern Arizona University, Flagstaff."
e. When did this occur?
"1969-1970."

4. Person speaking: Father (La Juna)
a. Describe the situation. (1) Who or what was involved?
"Teacher and materials."
(2) Exactly what happened? What did you do, and/or what did others do?
"Easy going teacher. Made all the students feel at ease."
(3) If learning conditions were involved, what made them helpful?
"No strict rules to go by."
b. Why do you think you learned so well in this situation?
"I felt at ease. Everybody could communicate well and asked a lot of questions."
c. What effects did this incident have on you?
"Made me ask more questions. I wasn't as scared. Learned a lot this way."
d. In what school did this occur?
"New Mexico State University."
e. When did this occur?
"Off and on through the years."

It can be seen that some of these aspects of behavior seem rather contradictory. One incident shows that these contradictory qualities may in fact <u>all</u> be important to effective teaching of Navajo students:

5. Person speaking: Mother (Navajo)
a. Describe the situation. (1) Who or what was involved?
"A teacher that was very strict, but not so strict that we didn't like him. He teased us and was kind."
(2) Exactly what happened? What did you do, and/or what did others do?
"He put us to work in a project or a textbook. We had to listen very hard or else he wasn't going to explain the problem to us again and again."
(3) If learning conditions were involved, what made them helpful?
"It was just the atmosphere in the room from the minute we walked into the room that told us that the teacher meant business."
b. Why do you think you learned so well in this situation?

"I felt that he was strict that didn't give anyone a chance to mess around. He was well liked by the students, but they were willing to work to please him. He gave us grades we deserved."
c. What effects did this incidents have on you?
"Well, without his teaching I could have never made it. I think he changed the attitude in me not liking school."
d. In what school did this occur?
"Intermountain School, Brigham City, Utah."
e. When did this occur?
"1960."

Conditions of Learning. Four incidents fell within this category. These incidents varied widely and all are shown below:

1. Person speaking: Father (Navajo)
   a. Describe the situation. (1) Who or what was involved?
   "Student council initiation."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "Went through physical test blindfold--such going through by climbing stepladder blindfolded and force us to jump which I did and landed on stack of mattresses."
   (3) If learning conditions were involved, what made them helpful?
   "Response to the sound of movement."
   b. Why do you think you learned so well in this situation?
   "The condition made me take and give in all facts of life."
   c. What effects did this incident have on you?
   "Increase my belief in standing on my own two feet."
   d. In what school did this occur?
   "Ute Vocational High School."
   e. When did this occur?
   "1950."
2. Person speaking: Father (Mission)
   a. Describe the situation. (1) Who or what was involved?
   "Students and Navajo C.C. having general assemblies."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "They protested the direction of the administration and asked for the resignation of the college president.
   (3) If learning conditions were involved, what made them helpful?
   "I believe what transpired was the students wanted to control their destiny and have more contact with leadership."
   b. Why do you think you learned so well in this situation?
   "Saw it first hand."
   c. What effects did this incident have on you?
   "Reinstated my belief in the power of groups of people to effectively in a positive manner change things."
   d. In what school did this occur?
   "Navajo Community College."
   e. When did this occur?
   "10/1/76 to 1/30/77."
3. Person speaking: Father (Navajo)
   a. Describe the situation. (1) Who or what was involved?
   "Public speaking--speaking to a class for 20 minutes on a specific subject."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "I was criticized severely concerning my speech--basically the ideas used to support my stand. I tried to defend my facts and ideas as best I could and this also brought other students to my aid. This

taught me to stand up for my beliefs."
(3) If learning conditions or materials were involved, what made them helpful?
"Blackboards."
b. Why do you think you learned so well in this situation?
"I was on the spot and had to defend myself to the best of my ability."
c. What effects did this incident have on you?
"I learned to defend myself in front of people.
d. In what school did this occur?
"Oak Park and River Forest High School, Oak Park, Illinois."
e. When did this occur?
"1961."

4. Person speaking: Father (Sioux)
a. Describe the situation. (1) Who or what was involved?
"Self and school."
(2) Exactly what happened? What did you do, and/or what did others do?
"I was required to hand in 8 book reports which I didn't do, graduation was 2 months away. The rest of the students did their reports while I played around."
(3) If learning conditions or materials were involved, what made them helpful?
"Stay after school for a whole month and finished my 8 book reports. I graduated with rest of students."
b. Why do you think you learned so well in this situation?
"Always do what had to be done."
c. What effects did this incident have on you?
"Was very proud of myself. It reminded me of the story of the grasshopper and the ant."
d. In what school did this occur?
"Flandreau Indian School."
e. When did this occur?
(No response recorded.)

Incidents of Ineffective Learning Methods, Materials, or Conditions/Teacher Characteristics

Incidents were classified into five main types:

Situation Conflicting with the Navajo Culture. Three incidents fell within this category, and the category was implied in 2 others as well. One incident described a situation in which the student was not allowed to help a slower friend during class. The other four described situations in which students were forced to cut up animals in biology class, a situation which goes against Navajo religion. Examples are:

1. Person speaking: Mother (Navajo)
a. Describe the situation. (1) Who or what was involved?
"The subject (part)."
(2) Exactly what happened? What did you do, and/or what did others do?
"The dissecting of insects and reptiles."
(3) If learning conditions or materials were involved, what made them harmful?
"Having an Indian culture, it affects the human being in the Indian races."

b. Why do you think you did not learn well in this situation
"Because it doesn't mix in the culture."
c. What effects did this incident have on you?
"I still did the Biology. I got a "B" for it--but my mind was bothered."
d. What changes in that situation would have helped you to learn better?
"It would be better to show it on film and drawings."
e. In what school did this occur?
"Gallup High School."
f. When did this occur?
"1961."

2. Person speaking: Other adult (Mission or Navajo)
a. Describe the situation. (1) Who or what was involved?
"Subject and teacher."
(2) Exactly what happened? What did you do, and/or what did others do?
"I was explaining the lesson to a slower friend. Teacher shouted 'Shut up!', be quiet. Happened second time again same day, was told to leave room and the teacher came out and hit me with a ruler, and I grabbed the ruler and struck back at the teacher."
(3) If learning conditions or materials were involved, what made them harmful?
"Wooden ruler. Also a chair was involved."
b. Why do you think you did not learn well in this situation?
"First week with school. First time with ruler. Was not allowed to help a slower friend."
c. What effects did this incident have on you?
"Follow the rules of the school. Made you hit back."
d. What changes in that situation would have helped you learn better?
"Understanding teacher."
e. In what school did this occur?
"Window Rock Junior High."
f. When did this occur?
"1968."

Unsuitable Learning Methods. Six incidents fell within this classification. Two mentioned that dissection of frogs made them sick (see section above). Others concerned class lectures (too many, too boring, right after lunch, too complicated), active participation (not enough), and textbooks (none or with ineffective features). Examples are:

1. Person speaking: Mother (Navajo)
a. Describe the situation. (1) Who or what was involved?
"Lack of training of teachers."
(2) Exactly what happened? What did you do, and/or what did others do?
"Effective methods to teach the kids weren't used."
(3) If learning conditions or materials were involved, what made them harmful?
"No learning conditions or materials were used--reason it was harmful, no actual participation."
b. Why do you think you did not learn well in this situation?
"Too much talking and not enough action."
c. What effects did this incident have on you?
"Not remembering how to cope with situation at the time till later when teaching by another person was effective."

d. What changes in that situation would have helped you to learn better?
"When participation was required or materials were actually dealt with."
e. In what school did this occur?
"Chinle High School."
f. When did this occur?
"1965."

2. Person speaking: Unknown (whole family Navajo)
a. Describe the situation. (1) Who or what was involved?
"Guest lecture in forestry school speaking on a boring subject right after lunch."
(2) Exactly what happened? What did you do, and/or what did others do?
"This lecture was boring and in most cases the lecturer spoke in a monotone. Others around were restless and prone to sleep."
(3) If learning materials were involved, what made them harmful?
(No response recorded.)
b. Why do you think you did not learn well in this situation?
"Subject material was boring and too scientific. Lectures after lunch."
c. What effects did this incident have on you?
"I now hate talks and meetings after lunch."
d. What changes in that situation would have helped you to learn better?
"Lectures in the morning and lecturer speaking on the same level as the student."
e. In what school did this occur?
"Colorado State University, Ft. Collins, Colorado."
f. When did this occur?
"1972."

3. Person speaking: Unknown (whole family Navajo)
a. Describe the situation. (1) Who or what was involved?
"Biology."
(2) Exactly what happened? What did you do, and/or what did others do?
"The whole class has to dissect a frog or any kind of reptile."
(3) If learning materials were involved, what made them harmful?
(No response recorded.)
b. Why do you think you did not learn well in this situation?
"Start throwing up or ruins my appetite."
c. What effects did this incident have on you?
(No response recorded.)
d. What changes in that situation would have helped you to learn better?
"Seeing film strips or pictures."
e. In what school did this occur?
"Window Rock High School."
f. When did this occur?
"1961-62."

4. Person speaking: Father (Sioux)
a. Describe the situation. (1) Who or what was involved?
"Self and school--college."
(2) Exactly what happened? What did you do, and/or what did others do?
"Teacher gave books and assignment."
(3) If learning materials were involved, what made them harmful?
"Books already had answers."
b. Why do you think you did not learn well in this situation?
"Time was limited, 20 months."

Staff Involved in Learning. Nineteen incidents fell into this category. All concerned teacher behavior. Seven aspects of teacher behavior were noted as important: (1) teacher unavailable in class in 1 incident; (2) lack of teacher enthusiasm for class in 1 incident; (3) teacher's presentation unclear or inadequate in 9 incidents; (4) individual help not given by teacher in 2 incidents; (5) teacher's refusal to answer questions in 1 incident; (6) teacher discouraging or unpleasant to students in 3 incidents; and (7) teacher requirements overly strict in 2 incidents. Examples are:

1. Person speaking: Mother (Navajo)
   a. Describe the situation. (1) Who or what was involved?
   "Shorthand class."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "Teacher not interested for students to learn."
   (3) If learning conditions were involved, what made them harmful?
   "Assignments not fully carried out by teachers."
   b. Why do you think you did not learn well in this situation?
   "Teacher's lack of interest."
   c. What effects did this incident have on you?
   "Did not care to study."
   d. What changes in that situation would have helped you to learn better?
   "Change to another class."
   e. In what school did this occur?
   "Window Rock High School."
   f. When did this occur?
   "1965."
2. Person speaking: Youth (Navajo/Ute/Cherokee/White)
   a. Describe the situation. (1) Who or what was involved?
   "Algebra Class."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "We do our own homework then we don't even get credit for it. Or the teacher assigns something and doesn't even explain it to us so we do it wrong and don't even know it. Got mad."
   (3) If learning materials were involved, what made them harmful?
   (No response recorded.)
   b. Why do you think you did not learn well in this situation?
   "Because I didn't even know what I was doing. And I don't even know if I did it wrong."
   c. What effects did this incident have on you?
   "It makes me think I'm not going to be ready for 10th grade."
   d. What changes in that situation would have helped you learn better?
   "Maybe he can explain it to me."
   e. In what school did this occur?
   "Navajo Junior High."
   f. When did this occur?
   "1, 2 and 3 terms 1977."
3. Person speaking: Mother (Navajo)
   a. Describe the situation. (1) Who or what was involved?
   "Teachers."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "In college, professors were not concerned with students. Teachers assumed that all students had similar backgrounds."

(3) If learning conditions or materials were involved, what made them harmful?
"Learning conditions were absent. If it had not been for former development, I'm sure I would have been a college dropout."
b. Why do you think you did not learn well in this situation?
"I did not learn to be a teacher. It wasn't until I experienced it. I used methods by hit and miss before I reached any conclusions."
c. What effects did this incident have on you?
"I question most persons supposedly educated because of my experiences with the mass learned of our society."
d. What changes in that situation would have helped you learn better?
"I keep trying because I am aware that formal education is the only way I will be able to help others."
e. In what school did this occur?
"N.A.V."
f. When did this occur?
"1960-present."

4. Person speaking: Mother (Navajo)
a. Describe the situation. (1) Who or what was involved?
"Subject: Mother and 4th grade teacher."
(2) Exactly what happened? What did you do, and/or what did others do?
"Was forced to stand at blackboard hours after school was out to complete long division problems I didn't understand. Teacher was impatient. She wasn't for individual help."
(3) If learning conditions or materials were involved, what made them harmful?
"Learning condition of working problems without proper procedures just frustrated me more."
b. Why do you think you did not learn well in this situation?
"Knowing I was forced to work problems caused me to tune out. We were on a competitive basis. No individual rate of learning was used. More of a group situation."
c. What effects did this incident have on you?
"To this day, if I can, I avoid math problems."
d. What changes in that situation would have helped you learn better?
"If teacher took time to sit down with me patiently and go through each step carefully. I would have enjoyed math. If she let students learn at own rate--not pushed."
e. In what school did this occur?
"Ganado Mission."
f. When did this occur?
"About 1957."

5. Person speaking: Mother (Navajo)
a. Describe the situation. (1) Who or what was involved?
"Instructor and student."
(2) Exactly what happened? What did you do, and/or what did others do?
"Students asked questions but their questions weren't answered."
(3) If learning conditions or materials were involved, what made them harmful?
"Lack of communication with workers. This happened while on the job training. The teacher himself needed more enrichment in the subject teaching."

b. Why do you think you did not learn well in this situation?
"Lack of communication."
c. What effects did this incident have on you?
"Dropped."
d. What changes in that situation would have helped you learn better?
"Transfer to another school."
e. In what school did this occur?
"Gallup Indian Medical Radiology School."
f. When did this occur?
"1975."

6. Person speaking: Youth (Navajo)
a. Describe the situation. (1) Who or what was involved?
"Male adult teacher."
(2) Exactly what happened? What did you do, and/or what did others do?
"He tends to pile lots of homework on you, more than you can handle."
(3) If learning conditions or materials were involved, what made them harmful?
"I wasn't putting much attention to the subject I was working on."
b. Why do you think you did not learn well in this situation?
"You don't concentrate well."
c. What effects did this incident have on you?
"You can't work on 4 different homework in 2 hours."
d. What changes in that situation would have helped you to learn better?
"Less homework."
e. In what school did this occur?
"Navajo Junior High."
f. When did this occur?
"1974, 1975."

Unfavorable Conditions Outside Class. Eleven incidents fell within this category. Most mentioned inability to go to school because of a sick family member, long bus ride, need for the student's labor around the home, lack of family support, or early marriage. A few mentioned problems with other students. One mentioned that the child was sniffing harmful materials. Examples are:

1. Person speaking: Father (Navajo)
a. Describe the situation. (1) Who or what was involved?
"Parents."
(2) Exactly what happened? What did you do, and/or what did others do?
"Because I had no child support from parents."
(3) If learning conditions or materials were involved, what made them harmful?
"They had not help of tribal clothing or the necessary items."
b. Why do you think you did not learn well in this situation?
"I was bothered in the competition of other students."
c. What effects did this incident have on you?
"I dropped out of school. I spent most of days in the hospital and didn't want to join in."
d. What changes in that situation would have helped you to learn better?
"To use better what comes to students in the school today."
e. In what school did this occur?
"Albuquerque Indian School.A
f. When did this occur?
"1959."

2. Person speaking: Mother (Navajo)
   a. Describe the situation. (1) Who or what was involved?
   "Mother."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "She had to help her dad to work to support family while other family finish school. She wishes to go back to school some day. She got tired of school. The students talked nasty."
   (3) If learning conditions or materials were involved, what made them harmful?
   "Just the teachers. The students just talked nasty."
   b. Why do you think you did not learn well in this situation?
   "I didn't know most of the subjects. I always got into trouble."
   c. What effects did this incident have on you?
   "She was glad to quit. She didn't feel the students should be nasty."
   d. What changes in that situation would have helped you to learn better?
   "If teachers could have explained better. That students should have had some lecture of being friends and polite."
   e. In what school did this occur?
   "Intermountain School, Hooker, Oklahoma."
   f. When did this occur?
   "1966;1973."
3. Person speaking. Father (Navajo)
   a. Describe the situation. (1) Who or what was involved?
   "Two students."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "Fighting."
   (3) If learning conditions or materials were involved, what made them harmful?
   "Tribal differences."
   b. Why do you think you did not learn well in this situation?
   "Person was hurt."
   c. What effects did this incident have on you?
   "Hurt his arm (broken)."
   d. What changes in that situation wuld have helped you learn better?
   "Teaching or counseling."
   e. In what school did this occur?
   "Intermountain Indian School, Brigham City, Utah."
   f. When did this occur?
   "1966."
4. Person speaking: Father (Mission)
   a. Describe the situation. (1) Who or what was involved?
   "Young child age 12."
   (2) Exactly what happened? What did you do, and/or what did others do?
   "The riding and catching bus early in the morning and traveling 22 miles to school was hard to adjust to."
   (3) If learning conditions or maerials were involved, what made them harmful?
   (No response recorded.)
   b. Why do you think you did not learn well in this situation?
   "The hardship in education exists on the Navajo Reservation."
   c. What effects did this incident have on you?
   "Just that I should be more understanding with young individuals that have had to go to great lengths to receive education."

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d. What changes in that situation would have helped you learn better?
(No response recorded.)
e. In what school did this occur?
"Chinlee School District."
f. When did this occur?
"September, 1976."

Unfavorable Conditions in Class. One incident fits into this category:

1. Person speaking: Unknown (whole family La Juna)
a. Describe the situation. (1) Who or what was involved?
"I was involved."
(2) Exactly what happened? What did you do, and/or what did others do?
"The students laughed when I couldn't pronounce a word correctly. From there on I was scared to read out loud."
(3) If learning conditions or materials were involved, what made them harmful?
(No response recorded.)
b. Why do you think you did not learn well in this situation?
"Because I was being laughed at."
c. What effects did this incident have on you?
"I was scared to stand up and talk or read."
d. What changes in that situation would have helped you learn better?
"If the students were advised not to laugh, but help in some way."
e. In what school did this occur?
"Saint Catherine."
f. When did this occur?
"High school."

NAVAJO COMMUNITY SCHOOL RESEARCH PROJECT

Navajo, New Mexico

EMPLOYER SURVEY

NAME OF BUSINESS _____

OR AGENCY _____

ADDRESS _____

PHONE _____

PRODUCT(S) OR SERVICE(S) PRODUCED _____

_____

NAME OF PERSON COMPLETING THIS SURVEY _____

DATE SURVEY COMPLETED _____

Developed by the Youth Development Research Group of the American Institutes for Research on a project with the Department of Education, Navajo Nation, Window Rock, Arizona, under support by the United States Office of Education, Department of Heath, Education, and Welfare under Part C of the Vocational Education Act of 1963.

April 1977

Questionnaire number _____

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GUIDELINES FOR COMPLETING THIS SURVEY

What Is it?

The proposed Navajo Community School will expect every high school student to learn vocational skills that are basic to a number of jobs. Each student will have approximately 1600 hours--the equivalent to 40 full weeks--to become proficient in those vocational skills that she/he, her/his parents, and school counseling personnel believe are appropriate to her/his career-life goals.

The major purpose of this employer survey is to determine what current and future job tasks and skills will be most beneficial to you and to the student. Information on these tasks and skills will be used to design instructional programs at the Navajo Community School.

How to Complete It?

Follow these steps in completing this survey:

First, briefly respond to the questions on the cover page. If multiple information is available on the addresses or phone numbers of your business or agency, list only the main address and phone number of the central office or location. Under "Date Survey Completed" list the last day if the survey took a series of days to complete. Do not enter anything in the box marked "Questionnaire Number."

Second, enter a numerical answer for each of the 12 items on page 1 of the survey. As noted in question 1 be sure to count yourself when appropriate in your answers to question 1-6. Questions 9 and 11 might be a little confusing. For these two, we seek information on new jobs your agency or business expects to develop--ones that do not currently exist. On the other hand, questions 10 and 12 refer to those existing jobs for which you expect employee turnover in the future.

Third, complete the chart on page 2 and use the additional copies of it on pages 3, 4, and 5 if you need them. Hopefully, the directions require no further explanation for this chart. By studying closely the example in the shaded area you should be able to resolve any final questions you have regarding this chart and how to record your answers.

Fourth, complete the chart on page 6 for one of the jobs you listed in the chart for item 13. Additional charts for the other jobs you recorded are provided on the remaining pages of this survey booklet. Be sure to circle your answers as indicated for the example in the shaded area.

Finally, once you have completed the survey, contact a staff member from the Navajo Community School Research Project. This should be the same person who gave the survey to you. Let her/him know that your completed instrument is ready to be picked up or make arrangements for mailing it to her/him.

Once again, thank you for your great cooperation.

1. Total number of employees at present time _____ (Be sure to include yourself.)

2. Total number of Navajo male employees at present time _____

3. Total number of other male employees at present time _____

4. Total number of Navajo female employees at present time _____

5. Total number of other female employees at present time _____

6. Total number of employees working:

   a. Regular, full-time (35 hours or more a week) _____
   b. Regular, part-time (34 hours or fewer a week) _____
   c. Seasonally (for a few weeks or months of the year) _____

7. Total number of job openings you filled during last 12 months _____

8. Total number of job openings ready to be filled now _____

9. Total number of new job openings expected to develop during the next 12 months____

10. Total number of job openings expected to result from employee turnover during the next 12 months _____

11. Total number of new job openings expected to develop 13-36 months from now _____

12. Total number of job openings expected to result from employee turnover 13-36 months from now _____

13. CURRENT AND ANTICIPATED EMPLOYMENT AND JOB OPENING INFORMATION

a. JOBS IN YOUR BUSINESS OR AGENCY	b. NUMBER OF CURRENT EMPLOYEES IN EACH JOB					c. NUMBER OF CURRENT AND ANTICIPATED JOB OPENINGS FOR NEW AND REPLACEMENT HIRINGS				d. TRAINING INFORMATION	
Job Titles Please list each different job in your business or agency. Include current jobs as well as ones expected to be available over the next three years. Add descriptive words (for example, classes or grades) that will clarify the nature of each job.	Number Please indicate numbers of persons presently employed in each job.					Current Job Openings		Anticipated Job Openings - within one year	Anticipated Job Openings - two-three years	Should the Navajo Community School train youth and adults to enter this job? (Check one for each job.)	
		Males		Females		Number of jobs in your business or agency that are unoccupied or ready to be filled immediately.		Number of job openings expected in your business or agency during the next 12 months and for which you will actively seek employees.	Number of job openings expected in your business or agency 13-36 months from now and for which you will actively seek employees.		
	Total	Navajos	Other	Navajos	Other	Total	Jobs Unfilled 1 month or longer			YES	NO
EXAMPLE: Clerk-Typist	3	1	0	2	0	1	0	1	2	✓	
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											

Use pages 3 through 5 as necessary.

13. CURRENT AND ANTICIPATED EMPLOYMENT AND JOB OPENING INFORMATION (continued)

a. JOBS IN YOUR BUSINESS OR AGENCY	b. NUMBER OF CURRENT EMPLOYEES IN EACH JOB					c. NUMBER OF CURRENT AND ANTICIPATED JOB OPENINGS FOR NEW AND REPLACEMENT HIRINGS				d. TRAINING INFORMATION	
Job Titles Please list each different job in your business or agency. Include current jobs as well as ones expected to be available over the next three years. Add descriptive words (for example, classes or grades) that will clarify the nature of each job.	Number Please indicate numbers of persons presently employed in each job.					Current Job Openings		Anticipated Job Openings - within one year	Anticipated Job Openings - two-three years	Should the Navajo Community School train youth and adults to enter this job? (Check one for each job.)	
		Males		Females		Number of jobs in your business or agency that are unoccupied or ready to be filled immediately.		Number of job openings expected in your business or agency during the next 12 months and for which you will actively seek employees.	Number of job openings expected in your business or agency 13-36 months from now and for which you will actively seek employees.		
	Total	Navajos	Other	Navajos	Other	Total	Jobs Unfilled 1 month or longer			YES	NO
EXAMPLE: Clerk-Typist	3	1	0	2	0	1	0	1	2	✓	
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											

Pages 4 and 5 continue to include 40 items.

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14. IMPORTANT TASKS AND SKILLS REQUIRED IN CURRENT AND ANTICIPATED JOBS

Please take each of the jobs you listed in Item 13. Include current jobs and ones expected to be available over the next three years. Write the title of one of those jobs below after "JOB TITLE." In the first column, identify the important tasks workers need to perform in that job. Use the remaining columns to indicate the most important tasks. Use a separate copy of this page for each job.

a. JOB TITLE (Use the same words recorded in the first column of Item 13):

_____

b. TASK IDENTIFICATION	c. TASK IMPORTANCE
Please list only those tasks that are important for the performance of this job. Begin each task with an action verb--one that describes an observable--hopefully a measurable--action.	Please indicate the importance of each task by rating it within each of the three categories. Circle the appropriate letter: **Frequency** a. Tasks performed more than 75 percent of the time on the job b. Performed 50-75 percent of the time c. Performed 25-49 percent of the time d. Performed less than 25 percent of the time **Quality** a. High quality performance is required b. Good quality performance is required c. Moderate quality performance is acceptable **Hiring Requirement** a. Very important that high school graduate be able to perform this task well b. Somewhat important c. Minor importance

	Frequency				Quality			Hiring Requirement		
	More than 75%	50-75%	25-49%	Less than 25%	High	Good	Moderate	Very important	Somewhat important	Minor importance
Example: Answers telephone	a	(b)	c	d	(a)	b	c	a	(b)	c
1.	a	b	c	d	a	b	c	a	b	c
2.	a	b	c	d	a	b	c	a	b	c
3.	a	b	c	d	a	b	c	a	b	c
4.	a	b	c	d	a	b	c	a	b	c
5.	a	b	c	d	a	b	c	a	b	c
6.	a	b	c	d	a	b	c	a	b	c
7.	a	b	c	d	a	b	c	a	b	c
8.	a	b	c	d	a	b	c	a	b	c
9.	a	b	c	d	a	b	c	a	b	c
10.	a	b	c	d	a	b	c	a	b	c
11.	a	b	c	d	a	b	c	a	b	c
12.	a	b	c	d	a	b	c	a	b	c
13.	a	b	c	d	a	b	c	a	b	c
14.	a	b	c	d	a	b	c	a	b	c
15.	a	b	c	d	a	b	c	a	b	c
16.	a	b	c	d	a	b	c	a	b	c

Use pages 7 through 17 as necessary. (Same as page 6).